Health and Social Service Manpower In Alberta, 1984

Alberta
HEALTH AND SOCIAL SERVICES
DISCIPLINES COMMITTEE
c/o Alberta Social Services and
Community Health
Seventh Street Plaza — South Tower
10030 - 107 Street
Edmonton, Alberta T5J 3E4

86-01549/

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FOREWORD

Health and Social Service Manpower in Alberta, 1984 presents manpower information and data on 35 human service occupations in Alberta. This publication is produced on behalf of the Alberta Health and Social Services Disciplines Committee by the Department of Social Services and Community Health. The Committee is confident that health and social service agencies, post-secondary educational institutions, government departments, and the general public will find this report a useful reference document on human service manpower.

The Alberta Health and Social Services Disciplines Committee is an interdepartmental body with representatives from four provincial government departments: Alberta Advanced Education, Alberta Hospitals and Medical Care, Alberta Manpower, and Alberta Social Services and Community Health. The Committee was established by the Ministers of these four departments to advise the government on major human service manpower, training, and related issues, and to coordinate the four departments' policy development, research, and data collection activities in relation to health and social service manpower.

The Committee wishes to thank those professional associations, licensing boards, educational institutions, and employing agencies which have provided valuable manpower data by participating in a number of surveys conducted by the Committee. Without their support and cooperation, the publication of Health and Social Services Manpower in Alberta, 1984 would not have been possible.

Elvin A. Christenson, F.C.A.

Chairman, Alberta Health and Social
Social Services Disciplines Committee

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INTRODUCTION

This is the seventh annual publication on health and social service manpower in Alberta. The Alberta Health and Social Services Disciplines Committee publishes this report with a view to making available to the public manpower information the Committee has collected from a variety of sources. The report contains information and statistical data on thirty-five health and social service occupations, including: functional definitions, information concerning professional associations, licensing bodies, and legislation, number of practitioners by location, historical manpower data, number of students in and graduates from health and social service training programs in Alberta, and information about continuing education programs.

SCOPE OF COVERAGE

The following thirty-five health and social service occupations are included in this report:

1. Audiologists/Speech Pathologists
2. Biomedical Engineers
3. Child Care Workers
4. Chiropractors
5. Combined Laboratory and X-Ray Technicians
6. Dental Assistants
7. Dental Hygienists
8. Dental Technicians
9. Dentists
10. Denturists
11. Dietary Technicians
12. Dietitians/Nutritionists
13. Emergency Medical Technicians
14. Health Records Administrators
15. Health Records Technicians
16. Medical Laboratory Technologists
17. Occupational Therapists

18. Ophthalmic Dispensers
19. Optometrists
20. Pharmacists
21. Pharmacy Assistants
22. Physicians
23. Physiotherapists
24. Podiatrists
25. Prosthetists and Orthotists
26. Psychiatric Nurses
27. Psychologists
28. Public Health Inspectors
29. Radiological Technicians
30. Recreational Therapists
31. Registered Nurses
32. Registered Nursing Assistants
33. Rehabilitation Practitioners
34. Respiratory Therapists
35. Social Workers

Two criteria were used to decide whether or not to include an occupation in this publication: It should be legislatively recognized and/or have a formal training program in Alberta. However, because of time constraints and limitation of resources, it was not possible to collect data on all human service occupations that meet these conditions. But it is the hope of the Alberta Health and Social Services Disciplines Committee that coverage will become more comprehensive in future editions.

Information on the geographic distribution of personnel in this report is based on census divisions, with separate statistical data for the Census Metropolitan Areas of Calgary and Edmonton. There are more detailed geographic distribution data for several larger occupational groups. Census divisions are used by many government agencies and non-government organizations as the primary geographical units for statistical purposes. The numbers of personnel in the Census Metropolitan Areas of Calgary and Edmonton are presented separately from their respective census divisions in order to give a better idea of the urban and non-urban distribution of personnel within these census divisions.[1] A map of the census divisions in Alberta is shown on Page 10.

The 1984 manpower data appearing in this publication are as of December 31, 1984, except where noted.

INFORMATION SOURCES

The principal sources of information reported in this publication are:

1. The 1980 revised edition of the Canadian Classification and Dictionary of Occupations;
2. Existing provincial legislation for the various occupations;
3. Provincial professional associations or licensing bodies for 33 health and social service manpower groups (two manpower groups have no professional associations or licensing bodies);
4. Surveys of employers of health and social service personnel conducted by the Alberta Health and Social Services Disciplines Committee; and
5. Survey of health and social service training programs in Alberta conducted by the Department of Advanced Education.

The Canadian Classification and Dictionary of Occupations is the source of many of the functional definitions appearing in this publication. In a few cases definitions were obtained from professional legislation or other sources. Information on legislation was obtained from existing Acts governing these occupational groups.

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[1] The Census Metropolitan Area of Edmonton includes the cities of Edmonton and St. Albert, the towns of Bon Accord, Fort Saskatchewan, Gibbons, Morinville, and Redwater, the village of Legal, the municipal district of Sturgeon #90, and the county of Strathcona #20. The Census Metropolitan Area of Calgary includes the City of Calgary.

Most of the manpower data and information on continuing education appearing in the report were obtained from professional associations and licensing bodies, particularly in cases where registration with a professional association or licensing body was mandatory. A survey of professional associations and licensing bodies was conducted by the Alberta Health and Social Services Disciplines Committee in December 1984. However, for those groups with voluntary registration, the number of personnel registered could represent only a fraction of the actual number of personnel. For these groups, surveys of employers of health and social service personnel were used, if possible, as alternative sources of data. These surveys were carried out by the Alberta Health and Social Services Disciplines Committee.

The Department of Advanced Education conducted a survey of human service training programs in post-secondary educational institutions in the province. The survey was designed to obtain, among other things, data on enrolment and the number of graduates. The results of the survey were published in Alberta Health and Social Service Training Program Inventory 1983-84 which is the source of information on basic education programs contained in this publication.

DATA LIMITATIONS

Manpower data supplied by the professional associations and the surveys of employers of health and social service personnel have a number of limitations:

1. Some registries include members who do not reside in Alberta. In most instances, out-of-province members were excluded for the purpose of this publication, but this was not feasible in some cases.

2. For those occupational groups where registration is not required in order to practice, registration figures generally underestimate the number of practitioners. The surveys of employers of health and social service personnel were used as alternative sources of data, wherever possible. Generally speaking, registration data from professional associations or registration bodies, for groups requiring mandatory registration, provide

manpower information about the potential number of personnel in the province. Manpower statistics from the surveys of employers, on the other hand, reflect the actual number of personnel practicing at the time of the surveys.

3. The March 31, 1984 survey of health and social service personnel working in Alberta has presented a number of problems. Prior to 1984, the annual survey of employers was conducted on September 30. The Alberta Health and Social Services Disciplines Committee decided to change the survey date to March 31, beginning in 1984, to coincide with the end of the fiscal year. In order to minimize technical difficulties resulting from the change in the survey date, the Committee decided not to survey the following groups in 1984: dental laboratories, dental clinics, ophthalmic dispensers, offices of dentists, ophthalmologists, and optometrists, community pharmacies, psychologists in independent practice, and post-secondary educational institutions. As a result, manpower data based on the 1984 survey were not comprehensive for some occupations.

MANPOWER SITUATION IN 1984

In 1979 the Alberta Health and Social Services Disciplines Committee began conducting manpower surveys of employers of health and social service personnel in Alberta. Eleven surveys have been conducted since 1979, two in each year from 1979 to 1983, and one in each year since 1983. The Committee's eleventh employer survey was conducted on March 31, 1984. Data were collected on 69 occupational groups from over 1,600 employing agencies, with a response rate of 97.2 percent.

As of March 31, 1984, there were 43,251 established "full-time equivalent" positions[2] for health and social service personnel in the employing agencies surveyed. At the time of the survey, there were 1,100 "full-time equivalent" vacant positions, representing an average vacancy rate of 2.5 percent. There were over 2,700 "full-time equivalent" resignations during the period from October 1, 1983 to March 31, 1984, representing an average turnover rate of 6.3 percent over that 6-month period.

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[2] This number does not necessarily reflect the number of persons actually employed. Two or more part-time personnel often fill one full-time position. In addition, the number of "full-time equivalent" positions also includes vacancies.

As of March 31, 1984, the occupational groups experiencing the highest vacancy rates were:

1. Ultrasound Technicians (14.2%);
2. Dental Hygienists (12.1%);[3]
3. Physiotherapists (9.2%);
4. Occupational Therapists (6.7%);
5. Rehabilitation Counsellors/Practitioners (6.6%);
6. Institutional Aides (6.1%);
7. Psychiatric Nurses (6.1%);
8. Occupational Therapy Assistants/Aides (5.9%);
9. Community Youth Workers (5.7%); and
10. Respiratory Technologists (5.6%).

The manpower groups with the highest rates of turnover between October 1, 1983 and March 31, 1984 were:

1. Life Skills Coaches (14.1%);
2. Physiotherapists (12.6%);
3. Community Youth Workers (11.3%);
4. Houseparents (10.6%);
5. Graduate Nurses (10.4%);
6. Social Service Aides (9.7%);
7. Occupational Therapists (9.5%);

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[3] As dentists' offices were not surveyed on March 31, 1984, the 12.1 percent vacancy rate only applies to dental hygienists working in local health authorities.

8. Pharmacy Assistants/Technicians (9.5%);[4]
9. Child Care Counsellors/Workers (9.3%); and
10. Rehabilitation Counsellors/Practitioners (9.2%).

TRAINING PROGRAMS

In 1983-84 Alberta had a total of 124 post-secondary educational programs to train health and social service personnel. These training programs were provided by 25 post-secondary educational institutions, hospitals, and cancer treatment centres in the province.

The Department of Advanced Education publishes, on behalf of the Alberta Health and Social Services Disciplines Committee, an annual report entitled Alberta Health and Social Service Training Program Inventory. The 1983-84 edition of this publication contained the following information on health and social service manpower training programs in Alberta:

1. Location and length of training programs;
2. Number of applicants;
3. First-year enrolment quota;
4. Actual enrolment; and
5. Number of graduates.

Readers who wish to obtain more information on training programs should consult this publication.

FORMAT OF THE PUBLICATION

The format of this publication closely follows the format of previous publications. Following this introduction, there are separate chapters on each of the 35 occupational groups. Each chapter is divided into four sections:

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[4] As community pharmacies were not surveyed on March 31, 1984, the 9.5 percent turnover rate applies only to pharmacy assistant/technicians who worked in institutions such as hospitals.

1. An overview section which includes a functional definition and statistical highlights of the occupational group;

2. A section on professional association and legislation;

3. A section on personnel data including number and geographic distribution of personnel in the province; and

4. A section on educational programs including both basic and continuing education.

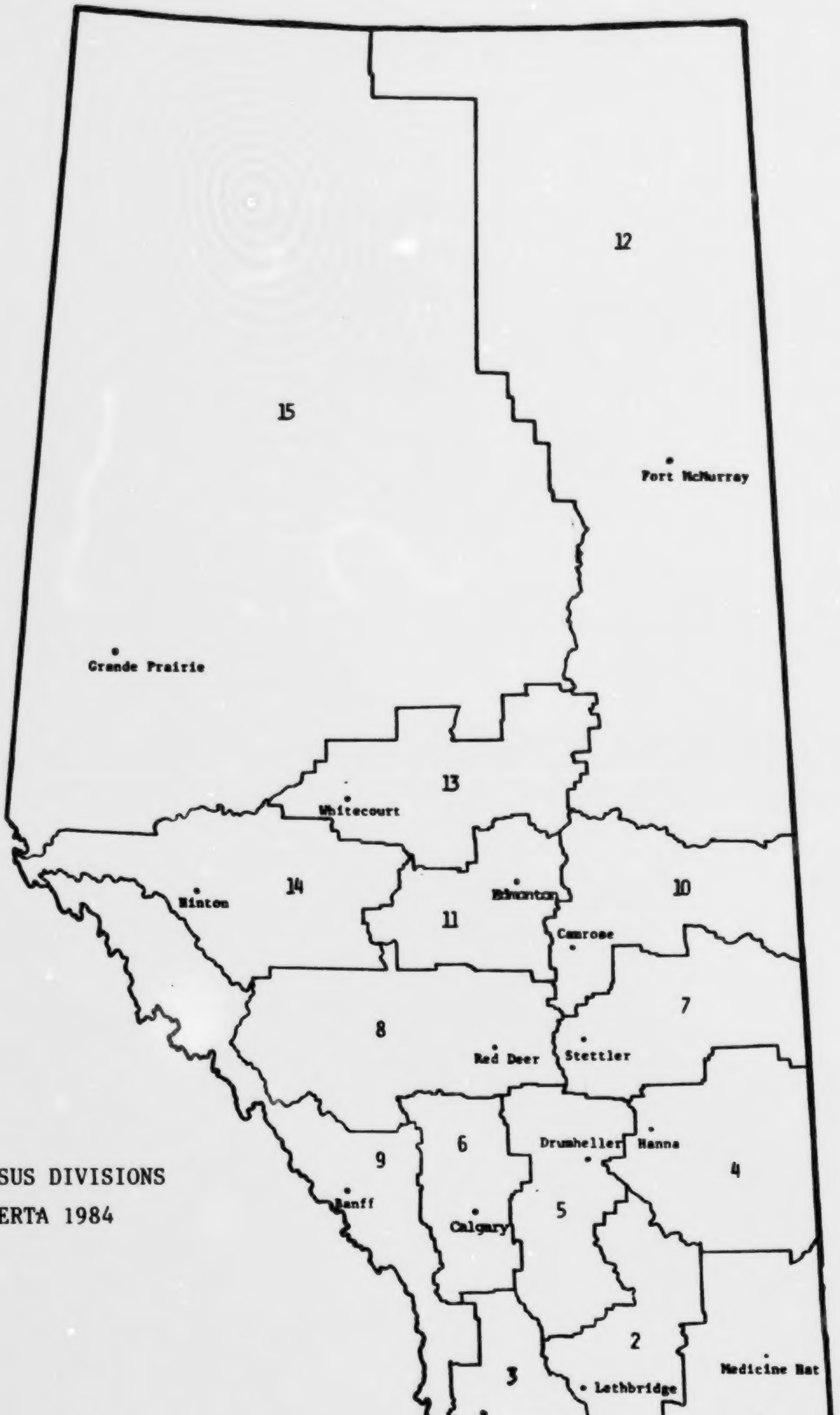
The chapters on dentists, physicians, and registered nurses contain additional information on personnel practicing in specialty areas.

HIGHLIGHTS BY OCCUPATIONAL GROUP

	Number of Registered/ Practicing Personnel	Personnel-to-Population Ratio	Legislation	Number of Alberta Training Programs	Number of Graduates
Audiologists and Speech Pathologists	184	1: 12,839		1	19
Biomedical Engineers	23	1:102,713		3	2
Child Care Workers	1,318	1: 1,792		2	58
Chiropractors	299	1: 7,901	X	-	-
Combined Laboratory and X-Ray Technicians	305	1: 7,746		1	25
Dental Assistants	1,786	1: 1,323	X	3	178
Dental Hygienists	562	1: 4,204	X	1	30
Dental Technicians	147	1: 16,071	X	1	12
Dentists	1,148	1: 2,058	X	1	46
Denturists	136	1: 17,371	X	1	12
Dietary Technicians	242	1: 9,762		2	50
Dietitians/ Nutritionists	339	1: 6,969	X	1	22
Emergency Medical Technicians	902	1: 2,619	X	2	315
Health Record Administrators	162	1: 14,583		1	14
Health Record Technicians	270	1: 8,750		1	16
Medical Laboratory Technologists	1,957	1: 1,207		3	112
Occupational Therapists	266	1: 8,881		1	42
Ophthalmic Dispensers	292	1: 8,090	X	-	-
Optometrists	187	1: 12,633	X	-	-
Pharmacists	1,872	1: 1,262	X	1	75
Pharmacy Assistants	120	1: 19,687		1	33
Physicians	3,701	1: 638	X	2	182
Physiotherapists	598	1: 3,951	X	1	45
Podiatrists	18	1:131,244	X	-	-
Prosthetists and Orthotists	45	1: 52,498		-	-
Psychiatric Nurses	612	1: 3,860	X	2	57
Public Health Inspectors	136	1: 17,371	X	-	-

HIGHLIGHTS BY OCCUPATIONAL GROUP (Continued)

	Number of Registered/ Practicing Personnel	Personnel-to-Population Ratio	Legislation	Number of Alberta Training Programs	Number of Graduates
Radiological Technicians	840	1: 2,812	X	4	64
Recreational Therapists	172	1: 13,735		1	19
Registered Nurses	20,124	1: 117	X	27	900
Registered Nursing Assistants	7,355	1: 320	X	3	316
Rehabilitation Practitioners	1,225	1: 1,928	X	4	106
Respiratory Therapists	298	1: 7,928	X	2	53
Social Workers	2,114	1: 1,118	X	5	291


12
15
Fort McMurray
Grande Prairie
13
Whitecourt
14
Hinton
11
Edmonton
10
Camrose
7
8
Red Deer
Stettler
6
Drumheller
Hanna
4
9
Banff
5
Calgary
2
3
Lethbridge
Medicine Hat
Pincher Creek
1

CENSUS DIVISIONS
ALBERTA 1984

AUDIOLOGISTS AND SPEECH PATHOLOGISTS

I. OVERVIEW

Definition: Audiologists

Provide diagnostic evaluation and rehabilitative services and conduct research related to hearing. Administer air and bone conduction and other audiometric tests and examinations to determine hearing efficiency. Coordinate audiometric results with medical, social, behavioural and other diagnostic data. Evaluate total response pattern and acoustic tests to differentiate between organic and non-organic hearing loss. Plan, direct and participate in counselling, speech-reading and other rehabilitation programs. Act as consultants to educational, medical and other professional groups. Conduct research in physiology, pathology, biophysics and psychophysics of auditory system, if required. Design and develop clinical and research procedures and apparatus, if required.

Speech Pathologists

Diagnose and treat speech, language and voice disorders and perform related research. Administer tests and observe patient to diagnose nature of disorder and to evaluate degree of impairment. Plan and conduct remedial exercises and programs to correct stuttering, abnormal articulation and other disorders. Provide speech training for patient with communication problems caused by cerebral palsy, surgical removal of larynx, hearing deficiencies or other impairments. Plan individual or group therapy in rehabilitation of communication disorders. Counsel and guide language-handicapped individuals and their families, teachers or employers. Act as consultants to educational, medical, dental and other professional groups. Conduct research related to development of diagnostic and treatment techniques and procedures or design of apparatus.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 251 audiologists and speech pathologists registered with the Speech and Hearing Association of Alberta (S.H.A.A.) in 1984[1], but registration is not compulsory for audiologists and speech pathologists. A survey of health and social service personnel working in Alberta was conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee. According to the survey, there were 19 audiologists and 165 speech pathologists practicing in the province.[2] It should be noted, however, that the March 31, 1984 survey was not comprehensive and not all speech and hearing personnel in the province were counted. The most recent comprehensive survey was conducted on September 30, 1983. According to this survey, there were 24 audiologists and 306 speech pathologists practicing in Alberta as of September 30, 1983.[3]

About 65 percent of the speech and hearing personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial audiologist-to-population ratio was 1:124,337 and the provincial speech pathologist-to-population ratio was 1:14,318 in 1984.

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[1] Source: Speech and Hearing Association of Alberta. Number registered with the S.H.A.A. as of October 31, 1984.

[2] "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[3] "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Professional Association:**

Speech and Hearing Association of Alberta
Box 8173, Station "F"
Edmonton, Alberta
T6H 4P1

President: Ms. Wendy Dawson

b) **Licensing, Registration, or Certification Authority:**

None.

c) **Legislation:**

There is no legislation regulating audiologists and speech pathologists in Alberta at present.

III. PERSONNEL DATA

TABLE 1A NUMBER OF AUDIOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	58,100	-
2 (Lethbridge)	1	117,900	1:117,900
3 (Pincher Creek)	0	38,300	-
4 (Hanna)	0	12,700	-
5 (Drumheller)	0	40,900	-
6 (Calgary)[3]	0	77,486	-
7 (Stettler)	0	42,500	-
8 (Red Deer)	0	134,300	-
9 (Banff)	0	23,600	-
10 (Camrose)	0	82,100	-
11 (Edmonton)[4]	0	118,752	-
12 (Fort McMurray)	0	92,100	-
13 (Whitecourt)	0	56,400	-
14 (Hinton)	0	27,000	-
15 (Grande Prairie)	0	137,800	-
Census Metropolitan Area of Calgary	8	619,814[5]	1: 77,477
Census Metropolitan Area of Edmonton	10	682,648[5]	1: 68,265
PROVINCIAL TOTAL	19	2,362,400	1:124,337

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 1B NUMBER OF SPEECH PATHOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	58,100	1:11,620
2 (Lethbridge)	10	117,900	1:11,790
3 (Pincher Creek)	2	38,300	1:19,150
4 (Hanna)	0	12,700	-
5 (Drumheller)	2	40,900	1:20,450
6 (Calgary)[3]	3	77,486	1:25,829
7 (Stettler)	2	42,500	1:21,250
8 (Red Deer)	8	134,300	1:16,788
9 (Banff)	1	23,600	1:23,600
10 (Camrose)	4	82,100	1:20,525
11 (Edmonton)[4]	9	118,778	1:13,198
12 (Fort McMurray)	7	92,100	1:13,157
13 (Whitecourt)	3	56,400	1:18,800
14 (Hinton)	2	27,000	1:13,500
15 (Grande Prairie)	5	137,800	1:27,560
Census Metropolitan Area of Calgary	48	619,814[5]	1:12,913
Census Metropolitan Area of Edmonton	54	682,648[5]	1:12,642
PROVINCIAL TOTAL	165	2,362,400	1:14,318

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	285[1]	330[2]	184[3]
% Change in Number of Practicing Personnel	4.4%	15.8%	N/A
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratio:			
- Alberta	1: 8,150	1: 7,141	1:12,839
- Western Canada[6]	-	1: 9,616	-
- Canada[7]	1:13,700	1:13,878	-

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[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: The discrepancy between the 1983 and 1984 figures is due to the fact that the 1984 survey is not a comprehensive survey. Therefore, not all audiologists and speech pathologists in the province were counted in 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Sources: (i) Rollcall 83. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee. The British Columbia figure refers to personnel who were registered (registration is not compulsory) and practicing. The Alberta figure refers to practicing personnel. The Manitoba and Saskatchewan figures refer to personnel registered with their respective provincial professional associations.

[7] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a four-year baccalaureate degree program in speech pathology and audiology, including one pre-professional year. There were 19 graduates from the program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAM FOR AUDIOLOGISTS AND SPEECH PATHOLOGISTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
University of Alberta (Program Length: 4 years)			
Enrolments: 1st Year	Pre-Professional Yr	Pre-Professional Yr	Pre-Professional Yr
2nd Year	25	30	32
3rd Year	23	25	27
4th Year	26	23	20
Graduates:	28	22	19

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The Continuing Education Committee of the Speech and Hearing Association of Alberta held a two-day workshop and four single-evening seminars, in addition to their annual three-day convention. Continuing education programs were also offered by Glenrose Rehabilitation Hospital and Alberta Social Services and Community Health. Two-day workshops were sponsored by these employing agencies.

BIOMEDICAL ENGINEERS

I. OVERVIEW

Definition: "Biomedical Engineering - usually either graduate engineers, mostly in electrical engineering with graduate training and experience in the biomedical sciences; or graduate engineers working in the field of Biomedical Engineering. Can play the following roles: provide engineering supervision of the technical staff, manage educational programs for others in the staff, efficient use of equipment, provide engineering consultation, improvement or innovative design of equipment, conduct research."[1]

(Source: Development in Biomedical Engineering in Canada - Manpower and Governmental Activities. Ottawa, Ontario: Health Manpower Directorate, Department of National Health and Welfare, 1973; pp. 2-3)

There were 23 biomedical engineers who were residing in Alberta and registered with the Canadian Medical and Biological Engineering Society in 1984.[2] Over 90 percent of the biomedical engineers were located in the Census Metropolitan Areas of Calgary and Edmonton. The biomedical engineer-to-population ratio in Alberta was 1:102,713 in 1984.

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[1] The term, "biomedical engineer," is often used much more loosely to cover physicists, computer specialists, technicians, etc., working in the biomedical field, many of whom are not qualified as engineers. In this chapter, this looser interpretation is used.

[2] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Professional Association:**

Canadian Medical and Biological Engineering Society
c/o National Research Council
Room 183, Building M-50
Ottawa, Ontario
K1A 0R8

National Executive Secretary: Mr. Nelson D. Durie

b) **Licensing, Registration, or Certification Authority:**

None.

c) **Legislation:**

There is no legislation regulating biomedical engineers in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF BIOMEDICAL ENGINEERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	0	58,100	-
2 (Lethbridge)	0	117,900	-
3 (Pincher Creek)	0	38,300	-
4 (Hanna)	0	12,700	-
5 (Drumheller)	0	40,900	-
6 (Calgary)[3]	0	77,486	-
7 (Stettler)	0	42,500	-
8 (Red Deer)	0	134,300	-
9 (Banff)	0	23,600	-
10 (Camrose)	0	82,100	-
11 (Edmonton)[4]	0	118,752	-
12 (Fort McMurray)	1	92,100	1: 92,100
13 (Whitecourt)	0	56,400	-
14 (Hinton)	0	27,000	-
15 (Grande Prairie)	1	137,800	1:137,800
Census Metropolitan Area of Calgary	6	619,814[5]	1:103,302
Census Metropolitan Area of Edmonton	15	682,648[5]	1: 45,510
PROVINCIAL TOTAL	23	2,362,400	1:102,713

[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR BIOMEDICAL ENGINEERS IN ALBERTA, 1982, 1983, and 1984

	1982	1983	1984
Number of Registered Personnel[1]	25	28	23
% Change in Number of Registered Personnel	-3.8%	12.0%	-17.8%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 92,908	1: 84,161	1:102,713
- Canada[4]	1: 81,259	1: 76,520	-

[1] Source: Canadian Medical and Biological Engineering Society. Number of biomedical engineers registered with the Canadian Medical and Biological Engineering Society and residing in Alberta as of December 31, 1984.

[2] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Department of Applied Sciences in Medicine at the University of Alberta offers graduate programs for physicists, engineers, computing scientists and other specialists. Masters and doctoral degree programs are available to students registered in the Department of Applied Sciences in Medicine or students registered in engineering or science faculties and carrying out their research within the Faculty of Medicine. In 1983-84, there were two graduates from the masters program and no graduates from the doctoral program.

TABLE 3 BASIC EDUCATION PROGRAMS FOR BIOMEDICAL ENGINEERS IN ALBERTA[1]

	1981-82	1982-83	1983-84
A. MASTERS PROGRAMS			
University of Alberta			
Masters of Science (offered by the Faculties of Engineering and Science)			
Enrolments:	4	8	2
Graduates:	2	3	1
University of Alberta			
Masters of Science (offered by the Department of Applied Sciences in Medicine)			
Enrolments:	2	2	4
Graduates:	-	0	1
PROVINCIAL TOTAL			
Number of M.Sc. Programs: 2			
Graduates	2	3	2
B. Ph.D. PROGRAM			
University of Alberta (Program Length: variable)			
Enrolments:	2	0	0
Graduates:	1	0	0

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[1] Source: Department of Applied Sciences in Medicine, the University of Alberta.

b) **Continuing Education Programs:**

The Canadian Medical and Biological Engineering Society has developed certification programs for clinical engineers and biomedical engineering technicians and technologists. The Association holds annual conferences and occasionally sponsors continuing education courses.

CHILD CARE WORKERS

I. OVERVIEW

Definition: Care for and counsel emotionally disturbed or mentally handicapped children and youths in residential treatment facility, in special school or social intervention program. Supervise daily activities and attend to needs of children and youth under care. Arrange and direct recreational activities. Counsel children and youths to help them deal with personal or behavioural problems. Enforce residential rules and take measures to control unruly behaviour. Assess and report problems and progress of children and youths. Confer with other staff members and refer difficult cases to health care professionals or social workers. Help to mediate between child and parents, if required. Provide individual guidance for youths in social intervention programs within community or assist in supervision of special school classes for emotionally disturbed children, if required. Prepare meals, clean and perform related housekeeping duties, if required.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Child Care Workers' Association of Alberta is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Socal Services Disciplines Committee, is used as an alternative source of manpower information.

There were 1,318 child care workers practicing in Alberta in 1984.[1] About 77 percent of the child care workers were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial child care worker-to-population ratio was 1:1,792 in 1984. As child care workers primarily work with children and adolescents, the provincial child care worker-to-population (5-17 years) ratio was 1:356 in 1984.[2]

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

It should be noted, however, that previous editions of this publication did not include community youth workers in the chapter on child care workers. As child care workers and community youth workers perform similar functions and have similar educational backgrounds, it has been decided to combine the two closely related occupational groups. This partially explains the significant increase in the number of child care workers in 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Child Care Workers' Association of Alberta
c/o Grant MacEwan Community College
Millwoods Campus
7319 - 29 Avenue
Edmonton, Alberta
T6K 2P1

President: Mr. Jack Phelan

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

There is no legislation regulating child care workers in Alberta at present.

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[2] Source: Population Projections, Alberta 1984-2011. Edmonton, Alberta: Alberta Bureau of Statistics, 1984.

III. PERSONNEL DATA

TABLE 1 NUMBER OF CHILD CARE WORKERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	24	58,100	1: 2,421
2 (Lethbridge)	59	117,900	1: 1,998
3 (Pincher Creek)	18	38,300	1: 2,128
4 (Hanna)	1	12,700	1:12,700
5 (Drumheller)	2	40,900	1:20,450
6 (Calgary)[3]	19	77,486	1: 4,078
7 (Stettler)	8	42,500	1: 5,313
8 (Red Deer)	34	134,300	1: 3,950
9 (Banff)	3	23,600	1: 7,867
10 (Camrose)	0	82,100	-
11 (Edmonton)[4]	8	118,752	1:14,844
12 (Fort McMurray)	56	92,100	1: 1,645
13 (Whitecourt)	3	56,400	1:18,800
14 (Hinton)	8	27,000	1: 3,375
15 (Grande Prairie)	67	137,800	1: 2,057
Census Metropolitan Area of Calgary	520	619,814[5]	1: 1,192
Census Metropolitan Area of Edmonton	488	682,648[5]	1: 1,399
PROVINCIAL TOTAL	1,318	2,362,400	1: 1,792

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[1] Source: "March 31, 1984 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR CHILD CARE WORKERS IN ALBERTA, 1982, 1983 AND 1984

	1982	1983	1984
Number of Practicing Personnel	1,114[1]	1,124[2]	1,318[3]
% Change in Number of Practising Personnel	-3.0%	0.9%	N/A
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	4.5%	1.5%	0.3%
Personnel-to-Population Ratio: - Alberta	1:2,085	1:2,097	1:1,792

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: This figure includes community youth workers, whereas in previous years community youth workers were not included.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In 1978-79 a two-year diploma program in youth development was offered by Grant McEwan Community College and a one-year certificate program in youth services was offered by Mount Royal College. In 1979-80 the one-year certificate program at Mount Royal College was replaced by a two-year diploma program. There were 58 graduates from the two programs in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAMS FOR CHILD CARE WORKERS IN ALBERTA[1]

	1981-82	1982-83	1983-84
DIPLOMA CHILD CARE PROGRAMS			
Grant McEwan Community College (Program Length: 2 years)			
Enrolments:			
1st Year	52	52	67
2nd Year	91	84	55
Graduates:	20	28	30
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	39	42	31
2nd Year	8	18	30
Graduates:[2]	11	7	23
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	31	35	58

[1] Source: *Alberta Health and Social Services Training Program Inventory, 1983-1984.* Edmonton, Alberta: Department of Advanced Education, December 1984.

[2] The number of graduates may exceed second year enrolment due to the manner in which second year student status is calculated and yearly graduate statistics are compiled.

b) Continuing Education Programs:

The Child Care Workers' Association of Alberta held an annual conference and a number of workshops in 1984. Continuing education programs were also offered by other organizations. An outreach program was offered by Grant McEwan Community College and a certification training program by Alberta Social Services and Community Health.

CHIROPRACTORS

I. OVERVIEW

Definition: A chiropractor practises the philosophy, science, and art of analyzing and the adjustment or manipulation of the human spinal column and other structures incidental thereto, and includes the use of x-ray and analytical instruments in relation thereto; "adjustment or manipulation" means a calculated procedure, force or thrust designed to move one structure in relation to another, particularly of the spinal column, to remove subluxations or fixations and to mobilize the affected structures for the purpose of restoring or maintaining health.

(Source: The Chiropractic Profession Act, Ch. 14, S.2[a][e])

There were 299 chiropractors who were residing in Alberta and registered with the Alberta Chiropractic Association (A.C.A.) in 1984.[1] About half of the chiropractors were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of chiropractors registered in Alberta increased by 6.4 percent between 1982 and 1984 while the provincial population grew by 1.7 percent during the same period. The provincial chiropractor-to-population ratio was 1: 7,901 in 1984.

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[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the A.C.A. and residing in Alberta as of April 15, 1984. Excludes inactive, honorary, and retired members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Chiropractic Association
516, 10235 - 101 Street
Edmonton, Alberta T5J 3G1

Registrar: Dr. David E. Peterson

b) Licensing, Registration, or Certification Authority:

Alberta Chiropractic Association
516, 10235 - 101 Street
Edmonton, Alberta T5L 0T3

and

Chiropractic Appraisal Board
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta T5J 3W7

c) Legislation:

Under the authority of the Chiropractic Profession Act, all individuals who wish to practice as chiropractors must register with the A.C.A. Annual re-registration with the Association is required of all chiropractors in order to continue to practice in Alberta.

The A.C.A. is responsible for regulating the conduct and discipline of chiropractors. The Chiropractic Appraisal Board, a provincial government certification body, sets the educational qualifications required for registration with the A.C.A. Any individual who is a graduate of a training program approved by the Board, and who passes an examination prescribed by the Board, or who is a member of the Canadian Chiropractic Association can be certified by the Board as being eligible for registration.

Although a new Chiropractic Profession Act has been passed, it has not yet been proclaimed. When proclaimed, it will replace the existing Act. The Chiropractic Appraisal Board will also cease to exist when the new legislation comes into effect.

III. PERSONNEL DATA

TABLE 1 NUMBER OF CHIROPRACTORS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	10	58,100	1: 5,810
2 (Lethbridge)	22	117,900	1: 5,359
3 (Pincher Creek)	4	38,300	1: 9,575
4 (Hanna)	1	12,700	1:12,700
5 (Drumheller)	7	40,900	1: 5,843
6 (Calgary)[3]	16	77,486	1: 4,843
7 (Stettler)	5	42,500	1: 8,500
8 (Red Deer)	28	134,300	1: 4,796
9 (Banff)	3	23,600	1: 7,867
10 (Camrose)	13	82,100	1: 6,315
11 (Edmonton)[4]	18	118,752	1: 6,597
12 (Fort McMurray)	6	92,100	1:15,350
13 (Whitecourt)	7	56,400	1: 8,057
14 (Hinton)	2	27,000	1:13,500
15 (Grande Prairie)	7	137,800	1:19,686
Census Metropolitan Area of Calgary	79	619,814[5]	1: 7,846
Census Metropolitan Area of Edmonton	71	682,648[5]	1: 9,615
PROVINCIAL TOTAL	299	2,362,400	1: 7,901

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[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the A.C.A. and residing in Alberta as of April 15, 1984. Excludes inactive, honorary, and retired members.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR CHIROPRACTORS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered Personnel[1]	281	291	299
% Change in Number of Registered Personnel	6.8%	3.6%	2.7%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 8,266	1: 8,098	1: 7,901
- Western Canada[4]	-	1: 9,284	-
- Canada[5]	1:12,568	1:12,393	-

[1] Source: Alberta Chiropractic Association. Number of chiropractors registered with the Alberta Chiropractic Association and residing in Alberta. Excludes inactive, honorary, and retired members.

[2] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Sources: (i) Rollcall 83. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee.

[5] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There is no training program for chiropractors in Alberta. The only institution where chiropractic training can be obtained in Canada is the Canadian Memorial Chiropractic College in Toronto, which offers a four-year training program. Many of Alberta's chiropractors received their chiropractic training in the United States.

b) Continuing Education Programs:

The Alberta Chiropractic Association sponsored four seminars for its members in 1984. Continuing and post-graduate education programs were also offered by most colleges of chiropractic, and members are encouraged to upgrade their skills regularly, through any accredited teaching body.

COMBINED LABORATORY AND X-RAY TECHNICIANS

I. OVERVIEW

Definition: The combined technician is a hospital worker trained to perform laboratory and x-ray work in smaller hospitals that do not have sufficient volume or range of work to warrant their employing both a laboratory technologist and an x-ray technician.

(Source: Saskatchewan Health Manpower Annual Report 1976. Regina, Saskatchewan: Saskatchewan Health, 1976)

Since registration with the Alberta Society of Certified Combined Technicians is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 305 combined laboratory and x-ray technicians practicing in Alberta in 1984.[1] About 34 percent of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial personnel-to-population ratio was 1: 7,746 in 1984. In major urban centers, most of the services provided by combined laboratory and x-ray technicians are also provided by medical laboratory technologists and radiological technicians (see chapters on Medical Laboratory Technologists and Radiological Technicians).

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Certified Combined Technicians
P.O. Box 2575
Drayton Valley, Alberta
TOE OMO

President: Ms. Colleen Sekula

b) Licensing, Registration, or Certification Authority:

Alberta Health Disciplines Board.

c) Legislation:

On November 13, 1984 the Legislative Assembly of Alberta designated the discipline of combined laboratory and x-ray technicians under the Health Disciplines Act. The Minister Responsible for Professions and Occupations will establish a committee for this discipline. This committee will be responsible for preparing draft regulations for this discipline which will be presented to the Health Disciplines Board.

III. PERSONNEL DATA

TABLE 1

NUMBER OF COMBINED LABORATORY AND X-RAY TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	2	58,100	1:29,050
2 (Lethbridge)	19	117,900	1: 6,205
3 (Pincher Creek)	4	38,300	1: 9,575
4 (Hanna)	8	12,700	1: 1,588
5 (Drumheller)	6	40,900	1: 6,817
6 (Calgary)[3]	14	77,486	1: 5,535
7 (Stettler)	23	42,500	1: 1,848
8 (Red Deer)	24	134,300	1: 5,596
9 (Banff)	3	23,600	1: 7,867
10 (Camrose)	26	82,100	1: 3,158
11 (Edmonton)[4]	14	118,752	1: 8,482
12 (Fort McMurray)	15	92,100	1: 6,140
13 (Whitecourt)	18	56,400	1: 3,133
14 (Hinton)	4	27,000	1: 6,750
15 (Grande Prairie)	21	137,800	1: 6,562
Census Metropolitan Area of Calgary	20	619,814[5]	1:30,991
Census Metropolitan Area of Edmonton	84	682,648[5]	1: 8,127
PROVINCIAL TOTAL	305	2,362,400	1: 7,746

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2

SELECTED MANPOWER STATISTICS FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	271[1]	239[2]	305[3]
% Change in Number of Practicing Personnel	-4.6%	-11.8%	27.6%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios: - Alberta	1: 8,571	1: 9,860	1: 7,746

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Northern Alberta Institute of Technology offers a one-year program leading to a certificate in combined laboratory and x-ray technology. There were 25 graduates from the program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAM FOR COMBINED LABORATORY AND X-RAY TECHNICIANS IN ALBERTA[1]

	1981-82	1982-83	1983-84
Northern Alberta Institute of Technology (Program: 1 year)			
Enrolments:	28	29	37
Graduates:	20	22	25

[1] Source: *Alberta Health and Social Services Training Program Inventory, 1983-84*. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The Alberta Society of Certified Combined Technicians held an annual convention and ran a number of workshops for its members in 1984. The Alberta Society of Medical Laboratory Technologists and the Canadian Society of Laboratory Technologists also offered some continuing education programs for combined laboratory and x-ray technicians.

DENTAL ASSISTANTS

I. OVERVIEW

Definition: Assist dentists in care and treatment of patients. Seat and prepare patient for dental treatment. Arrange instruments, materials and medications and hand them to the dentist. Keep oral operating area clear during dental procedure by using suction devices, water sprays, cotton rolls and holders, and by retraction of cheek and tongue. Prepare filling materials, using mechanical amalgamator and instruments and supply them to dentist as required. Comfort patient through reassuring conversation and actions. Give emergency treatment, as directed by dentist, for local and systemic distress. Advise patients on post-operative care, oral hygiene, and importance of diet and preventive dentistry. Sterilize instruments, using ovens, autoclaves and aseptic solutions. Pour, trim and mount plaster models from impressions taken by dentist and perform other dental laboratory procedures. Perform routine maintenance duties such as lubricating equipment, sharpening dental instruments, replacing expendable parts and cleaning equipment and treatment area. Expose, process and mount X-ray films. Polish teeth, apply fluoride to teeth and perform other intra-oral procedures, as permitted by training and by provincial legislation. Act as receptionist, if required.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Dental Assistants Association is not mandatory, the manpower surveys conducted by the Alberta Health and Social Services Disciplines Committee, are used as an alternative source of manpower information. The March 31, 1984 survey of health and social service personnel working in Alberta enumerated dental assistants working in health care organizations and agencies such as local boards of health but did not count dental assistants working in offices of dentists. This deficiency is remedied to a certain extent by a retroactive survey conducted in 1985 which asked dentists to indicate the number of dental auxiliary personnel working in their offices in 1984. The manpower data presented in this chapter represents the combined data from these two surveys.

According to the two surveys conducted by the Alberta Health and Social Services Disciplines Committee, there were 1,786 dental assistants practicing in the province in 1984.[1] About two-thirds of the dental assistants were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial dental assistant-to-population ratio was 1:1,323 in 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Dental Assistants Association
50 Chinook Dr. S.W.
Calgary, Alberta
T2V 2P6

Administrative Assistant/Registrar: Ms. Vicki Kranenburg, CDA

b) Licensing, Registration, or Certification Authority:

Alberta Dental Assistants Association
50 Chinook Drive S.W.
Calgary, Alberta
T2V 2P6

c) Legislation:

The Dental Profession Act established the Dental Occupations Council consisting of two hygienists, two dentists, and two assistants, each appointed by their respective professional association. This group recommends to the Board of the Alberta Dental Association regulations regarding the duties, conditions of practice, standards of conduct and competency, and disciplinary procedures for dental assistants.

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[1] Source: "March 31, 1984 Surveys of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984; and information collected retroactively from the March 31, 1985 survey conducted by the Alberta Health and Social Services Disciplines Committee.

Currently, routine dental assisting does not require certification. Intra-oral functions, however, may only be provided by those dental assistants who have been certified by the Alberta Dental Assistants Association to do so.

Regulations giving the Alberta Dental Assistants Association the authority to register, license, and discipline dental assistants are in the draft stage.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DENTAL ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	40	58,100	1:1,453
2 (Lethbridge)	93	117,900	1:1,268
3 (Pincher Creek)	30	38,300	1:1,277
4 (Hanna)	8	12,700	1:1,588
5 (Drumheller)	19	40,900	1:2,153
6 (Calgary)[3]	30	77,486	1:2,583
7 (Stettler)	15	42,500	1:2,833
8 (Red Deer)	79	134,300	1:1,700
9 (Banff)	17	23,600	1:1,388
10 (Camrose)	42	82,100	1:1,955
11 (Edmonton)[4]	56	118,752	1:2,121
12 (Fort McMurray)	55	92,100	1:1,675
13 (Whitecourt)	30	56,400	1:1,880
14 (Hinton)	14	27,000	1:1,929
15 (Grande Prairie)	64	137,800	1:2,153
Census Metropolitan Area of Calgary	561	619,814[5]	1:1,105
Census Metropolitan Area of Edmonton	633	682,481[5]	1:1,078
PROVINCIAL TOTAL	1,786	2,362,400	1:1,323

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984; and information collected retroactively from the March 31, 1985 survey conducted by the Alberta Health and Social Services Disciplines Committee.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL ASSISTANTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	1,601[1]	1,795[2]	1,786[3]
% Change in Number of Practicing Personnel	3.6%	12.1%	-0.5%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 1,451	1: 1,313	1:1,323
- Western Canada[6]	1: 1,574	-	-
- Canada[7]	1:12,049	1:11,748	-

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December, 1984; and information collected retroactively from the March 31, 1985 survey conducted by the Alberta Health and Social Services Discipines Committee.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: 1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: (i) Rollcall Update 82. Vancouver, British Columbia: Division of Health Servcies Research and Development, University of British Columbia, March 1983. (ii) Health Manpower Provincial Report, Manitoba, 1982. Winnipeg, Manitoba: Manitoba Department of Health, 1982. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

[7] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer 37-week dental assistant training programs. The number of graduates from these two programs was 93 in 1983-84. In addition, the Northern Alberta Institute of Technology offers a 20-month dental assistant training program by correspondence. This program, which is designed for dental assistants presently employed in dental offices, had 151 students and produced 85 graduates in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAMS FOR DENTAL ASSISTANTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
Northern Alberta Institute of Technology (Program Length: 9½ months)			
Enrolments:	85	71	63
Graduates:	70	68	59
Southern Alberta Institute of Technology (Program Length: 37 weeks)			
Enrolments:	40	40	40
Graduates:	36	33	34
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	106	101	93

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The Alberta Dental Assistants Association provided some continuing education programs for its members in 1984. The Association offered a number of seminars in conjunction with its annual convention. A correspondence course on Insurance Claim Forms was also made available by the Association.

Workshops and seminars organized by local dental societies are opened to dental assistants. As well, the University of Alberta and the Northern Alberta Institute of Technology offer continuing education programs for dental assistants.

DENTAL HYGIENISTS

I. OVERVIEW

Definition:	Provide preventive dental services and instruct patients in care of teeth and mouth. Scale and polish teeth to remove hard and soft deposits, using dental instruments and equipment. Polish fillings to remove tarnish and corrosion, using motorized apparatus. Apply topical agents and sealants to teeth to reduce decay. Conduct preliminary dental examination and record case history of patient. Record observed conditions and information for diagnosis and treatment planning by dentist. Instruct individuals and groups in home dental care and provide dietary counselling related to dental health. Expose, process and mount dental x-ray films. Take impressions of teeth for study models. Administer local anaesthetics, place, finish and polish fillings and remove sutures as permitted by training and by provincial legislation. (Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Dental Hygienists Association is not mandatory, the manpower surveys conducted by the Alberta Health and Social Services Discipline Committee, are used as an alternative source of manpower information. The March 31, 1984 survey of health and social services personnel working in Alberta enumerated dental hygienists working in health care organizations and agencies such as local boards of health but did not count dental hygienists working in offices of dentists. This deficiency is remedied to a certain extent by a retroactive survey conducted in 1985 which asked dentists to indicate the number of dental auxiliary personnel working in their offices in 1984. The manpower data presented in this chapter represent the combined data from these two surveys.

According to the two surveys conducted by the Alberta Health and Social Services Disciplines Committee, there were 562 dental hygienists practicing in the province in 1984.[1] About two-thirds of the dental hygienists were employed in the Census Metropolitan areas of Calgary and Edmonton. The provincial dental hygienist-to-population ratio was 1:4,204 in 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Dental Hygienists Association
#1, 14310 - 80 Street
Edmonton, Alberta
Calgary, Alberta
T5C 1L6

President: Ms. Joanne Clovis

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

The Dental Profession Act established the Dental Occupations Council consisting of two hygienists, two dentists, and two assistants, each appointed by their respective professional association. This group recommends to the Board of the Alberta Dental Association regulations regarding the duties, conditions of practice, standards of conduct and competency, and disciplinary procedures for dental hygienists.

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984; and information collected retroactively from the March 31, 1985 survey conducted by the Alberta Health and Social Services Disciplines Committee.

In order to practice in the province, dental hygienists must be graduates of the Dental Hygiene Program at the University of Alberta or, if they are graduates from other training programs, they must be certified by the Universities Co-ordinating Council.

Although registration and licensure are not mandatory at present, regulations giving the Alberta Dental Hygienists Association the authority to register, license, and discipline dental hygienists are in the draft stage.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DENTAL HYGIENISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	18	58,100	1: 3,228
2 (Lethbridge)	26	117,900	1: 4,535
3 (Pincher Creek)	6	38,300	1: 6,383
4 (Hanna)	4	12,700	1: 3,175
5 (Drumheller)	5	40,900	1: 8,180
6 (Calgary)[3]	6	77,486	1:12,914
7 (Stettler)	4	42,500	1:10,625
8 (Red Deer)	35	134,300	1: 3,837
9 (Banff)	2	23,600	1:11,800
10 (Camrose)	20	82,100	1: 4,105
11 (Edmonton)[4]	19	118,752	1: 6,250
12 (Fort McMurray)	20	92,100	1: 4,605
13 (Whitecourt)	5	56,400	1:11,280
14 (Hinton)	6	27,000	1: 4,500
15 (Grande Prairie)	14	137,800	1: 9,843
Census Metropolitan Area of Calgary	188	619,814[5]	1: 3,297
Census Metropolitan Area of Edmonton	184	682,648[5]	1: 3,710
PROVINCIAL TOTAL	562	2,362,400	1: 4,204

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984; and information collected retroactively from the March 31, 1985 survey conducted by the Alberta Health and Social Services Disciplines Committee.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL HYGIENISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	480[1]	503[2]	562[3]
% Change in Number of Practicing Personnel	17.4%	4.8%	11.8%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 4,839	1: 4,685	1: 4,204
- Western Canada[6]	1: 5,999	1: 5,368	1: 4,974
- Canada[7]	1: 5,615	1: 4,997	-

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Service Disciplines Committee, December 1984; and information collected retroactively from the March 31, 1985 survey conducted by the Alberta Health and Social Services Discipilnes Committee.

[4] Sources: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Division." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: The 1982 information is based on: (i) Rollcall Update 82. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1983. (ii) Health Manpower Provincial Report, Manitoba, 1982. Winnipeg, Manitoba: Manitoba Department of Health, 1982. (iii) Saskatchewan Health Manpower Report, 1982-1984. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.
The 1983 and 1984 information is based on: (i) Rollcall Update 84. Vancouver, British Columbia. Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Surveys of employers conducted by the Alberta Health and Social Services Disciplines Committee.

[7] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a two-year diploma program in dental hygiene. There were 30 graduates from the program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTAL HYGIENISTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	43	43	42
2nd Year	43	40	30
Graduates	42	39	30

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

Continuing education programs in dental hygiene are sponsored by the Faculty of Extension, the University of Alberta in 1984. In addition, the regional chapters of the Alberta Dental Hygienists Association provide some continuing education programs.

DENTAL TECHNICIANS

I. OVERVIEW

Definition: Make and repair dentures and other dental devices. Fabricate full and partial dentures, using wax and plaster models, dental surveyors, articulators (fitting devices) and electric grinders and polishers. Shape metal, vulcanite or plastic plates for dentures. Mount porcelain or plastic teeth in plates using knowledge of size, shape, shade and colour. Finish dentures on grinding and buffing wheels. Construct metal clasps, inlays, bridgework and other aides according to specifications. Join breaks, make additions or reline denture bases to repair dentures.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 147 dental technicians who were residing in Alberta and registered with the Dental Technicians Board located in 1984.[1] About 86 percent of the dental technicians were located in the Census Metropolitan Areas of Calgary and Edmonton. Dental technicians in Calgary and Edmonton handle much of the dental laboratory work for the rural areas of Alberta through the mail.

The number of dental technicians registered in Alberta decreased by 0.7 percent between 1982 and 1984 while the provincial population increased by 1.7 percent during the same period. The provincial dental technician-to-population ratio was 1:16,071 in 1984. Some of the services, such as the making of complete dentures, performed by dental technicians can also be provided by denturists (see chapter on Denturists).

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[1] Source: Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of October 23, 1984. Number includes dental technicians who were also denturists.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Registered Dental Technicians
c/o Mr. Kim Starko
Inter Provincial Dental Lab
10578 - 109 Street
Edmonton, Alberta
T5H 3B2

Secretary-Treasurer: Mr. Kim Starko

b) Licensing, Registration, or Certification Authority:

Dental Technicians Board
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Board Chairman: Dr. T. Curry

c) Legislation:

Under the authority of the Dental Technicians Act, all individuals who wish to practice as dental technicians must register with the Dental Technicians Board, a provincial government licensing body. Annual re-registration with the Board is required of all dental technicians in order to continue to practice in Alberta.

The Board is responsible for regulating the conduct and discipline of dental technicians. The Board also sets the educational qualifications required for registration.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DENTAL TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	58,100	1: 58,100
2 (Lethbridge)	8	117,900	1: 14,738
3 (Pincher Creek)	1	38,300	1: 38,300
4 (Hanna)	0	12,700	-
5 (Drumheller)	0	40,900	-
6 (Calgary)[3]	2	77,486	1: 38,743
7 (Stettler)	0	42,500	-
8 (Red Deer)	2	134,300	1: 67,150
9 (Banff)	0	23,600	-
10 (Camrose)	3	82,100	1: 27,367
11 (Edmonton)[4]	1	118,752	1:118,752
12 (Fort McMurray)	0	92,100	-
13 (Whitecourt)	0	56,400	-
14 (Hinton)	0	27,000	-
15 (Grande Prairie)	2	137,800	1: 68,900
Census Metropolitan Area of Calgary	44	619,814[5]	1: 14,087
Census Metropolitan Area of Edmonton	83	682,648[5]	1: 8,225
PROVINCIAL TOTAL	147	2,362,400	1: 16,071

[1] Source: Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta as of October 23, 1984. Number includes dental technicians who were also denturists.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTAL TECHNICIANS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered Personnel[1]	146	148	147
% Change in Number of Registered Personnel	-6.4%	1.4%	-0.7%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios: Alberta	1:15,909	1:15,922	1:16,071

[1] Source: Dental Technicians Board. Number of dental technicians registered with the Dental Technicians Board and residing in Alberta.

[2] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In order to become a dental technician, an individual must pass the examination set by the Dental Technicians Board and must have either five years of practical experience, of which one year is in Alberta, or a two-year dental technician diploma plus three years of practical experience.

A two-year diploma program on dental laboratory technology is offered at the Northern Alberta Institute of Technology (N.A.I.T.). The first year of the program is a "core" year with the denturist technology diploma program at N.A.I.T. There were 12 graduates from the program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTAL TECHNICIANS IN ALBERTA[1]

	1981-82	1982-83	1983-84
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	17	18	18
2nd Year	10	11	12
Graduates:	11	8	12

[1] Source: Alberta Health and Social Service Training Program Inventory 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

There were no continuing education programs offered by the Dental Technicians Board in 1984. The Dental Technicians Society, however, has started offering continuing education programs.

DENTISTS

I. OVERVIEW

Definition: The work of dentists is concerned with examining, diagnosing, preventing and treating ailments or abnormalities of gums and teeth including oral surgery.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,148 dentists who were residing in Alberta and registered with the Alberta Dental Association (A.D.A.) in 1984.[1] Of these dentists, 88 percent were general practitioners and 12 percent were specialists. The number of dentists by specialty is shown in a table appended to this chapter. About 71 percent of the dentists were graduates of the Faculty of Dentistry at the University of Alberta, 25 percent were graduates of dental training programs in other Canadian provinces, and 4 percent were graduates of schools of dentistry in other countries.

About 72 percent of the dentists were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of dentists registered in Alberta increased by 5.6 percent between 1982 and 1984 while the provincial population grew by 1.7 percent during the same period. The provincial dentist-to-population ratio was 1:2,058 in 1984.

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1984. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Dental Association
101, 8230 - 105 Street
Edmonton, Alberta
T6E 5H9

Executive Director: Dr. B.P. Martinello

b) Licensing, Registration, or Certification Authority:

Alberta Dental Association
101, 8230 - 105 Street
Edmonton, Alberta
T6E 5H9

c) Legislation:

Under the authority of the Dental Profession Act, which was proclaimed on October 10, 1984, all individuals who wish to practice as dentists must register with the Alberta Dental Association. Annual re-registration with the Association is required of all dentists in order to continue to practice in Alberta.

The A.D.A. is responsible for regulating the conduct of its members and disciplining them, if necessary. The Dental Profession Act sets the educational qualifications required for registration with the A.D.A. Post-basic educational qualifications required for registration as a dental specialist are set in the regulation of the Act. In addition, the Association has the authority to prescribe continuing education programs which must be completed by its members in order to qualify for re-registration. The Universities Coordinating Council is responsible for the certification of specialists.

III. PERSONNEL DATA

TABLE 1A

NUMBER OF DENTISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	18	58,100	1: 3,228
2 (Lethbridge)	46	117,900	1: 2,563
3 (Pincher Creek)	11	38,300	1: 3,482
4 (Hanna)	2	12,700	1: 6,350
5 (Drumheller)	11	40,900	1: 3,718
6 (Calgary)[3]	24	77,486	1: 3,229
7 (Stettler)	9	42,500	1: 4,722
8 (Red Deer)	45	134,300	1: 2,984
9 (Banff)	16	23,600	1: 1,475
10 (Camrose)	23	82,100	1: 3,570
11 (Edmonton)[4]	24	118,752	1: 4,948
12 (Fort McMurray)	28	92,100	1: 3,289
13 (Whitecourt)	15	56,400	1: 3,760
14 (Hinton)	12	27,000	1: 2,250
15 (Grande Prairie)	33	137,800	1: 4,176
Census Metropolitan Area of Calgary	374	619,814[5]	1: 1,657
Census Metropolitan Area of Edmonton	457	682,648[5]	1: 1,494
PROVINCIAL TOTAL	1,148	2,362,400	1: 2,058

---

[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1984. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 1B NUMBER OF DENTISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1984

Community by Size	Number Registered[1]	Population[2]	Dentist-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	374	619,814	1: 1,657
Census Metropolitan Area of Edmonton	457	682,648	1: 1,494
Between 10,000 and 60,000			
Airdrie	5	10,431	1: 2,086
Camrose	6	12,751	1: 2,125
Fort McMurray	9	35,352	1: 3,928
Grande Prairie	15	24,411	1: 1,627
Leduc	7	12,471	1: 1,782
Lethbridge	37	58,586	1: 1,583
Medicine Hat	19	41,493	1: 2,184
Red Deer	36	51,070	1: 1,419
Spruce Grove	6	11,569	1: 1,928
Wetaskiwin	5	10,022	1: 2,004
Between 5,000 and 10,000			
Brooks	4	9,421	1: 2,355
Drumheller	3	6,671	1: 2,224
Edson	5	7,110	1: 1,422
High River	3	5,114	1: 1,705
Hinton	5	8,904	1: 1,781
Innisfail	4	5,435	1: 1,359
Lacombe	3	5,954	1: 1,985
Lloydminster	7	9,226	1: 1,318
Peace River	4	6,043	1: 1,511
Ponoka	4	5,221	1: 1,305
Rocky Mountain House	4	5,126	1: 1,282
Stettler	3	5,136	1: 1,712
Stony Plain	6	5,291	1: 882
Taber	3	6,384	1: 2,128
Vegreville	3	5,251	1: 1,750
Whitecourt	3	5,408	1: 1,803
Under 5,000	123	690,088	1: 5,610
TOTAL	1,148	2,362,400	1: 2,058

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1984. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A..

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered Personnel[1]	1,087	1,138	1,148
% Change in Number of Registered Personnel	5.8%	4.7%	0.9%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
Percent Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratio:			
- Alberta	1:2,137	1:2,071	1:2,058
- Western Canada[4]	1:1,995	1:1,965	1:1,952
- Canada[5]	1:2,086	1:2,039	-

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1982, 1983, and 1984. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

[2] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Source: The 1982 information is based on: (i) Rollcall Update 82. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1983. (ii) Health Manpower Provincial Report, Manitoba, 1982. Winnipeg, Manitoba: Manitoba Department of Health, 1982. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to dentists registered with their respective provincial professional associations.
The 1983 and 1984 information is based on: (i) Rollcall Update 84. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Surveys of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to dentists registered with their respective provincial professional associations.

[5] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a four-year program in dentistry leading to a Doctor of Dental Surgery (D.D.S.) degree. A student must complete two years of "pre-dentistry" university preparation before acceptance into the program. There were 46 graduates from the program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTISTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
University of Alberta (Program length 4 years)			
Enrolments:			
1st Year	51	51	51
2nd Year	50	50	53
3rd Year	48	44	44
4th Year	49	48	48
Graduates:	49	48	46

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The Alberta Dental Association requires its members to participate in continuing education programs. Many courses in dentistry were offered in 1984 by the Continuing Education Department of the Faculty of Dentistry, the University of Alberta.

The seven local Dental Societies usually present one-day courses on a once-a-month basis throughout the year except for June, July, and August. Local Dental Societies, other than those in Calgary and

Edmonton, have such courses every two or three months. The courses presented cover a broad range of disciplines and topics.

Specialty societies/groups and other organizations also offer continuing education courses in Alberta on occasion. In addition, some dentists attend courses in other provinces and in the United States.

APPENDIX

DENTISTS BY SPECIALTY AND DENTIST-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1984[1]

Specialty	Number of Dentists	Dentist-to-Population Ratio
Dental Public Health	3	1: 787,467
Endodontics	15	1: 157,493
Oral Pathology	4	1: 590,600
Oral Radiology	2	1:1,181,200
Oral Surgery	17	1: 138,965
Orthodontics	49	1: 48,212
Paedodontics	15	1: 157,493
Periodontics	18	1: 131,244
Prosthodontics	14	1: 168,743
Specialty Total	137	1: 17,244
General Practice	1,011	1: 2,337
GRAND TOTAL	1,148	1: 2,058

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[1] Source: Alberta Dental Association. Number of dentists registered with the A.D.A. and residing in Alberta as of December 31, 1984. Excludes inactive and retired members and some dentists who worked for the Federal Government but were not registered with the A.D.A.

DENTURISTS

I. OVERVIEW

Definition:	Design, construct, fit and repair dentures. Measure patient's jaws to determine size and shape of dentures using face bows, dental articulators and other devices. Make impression and mould of teeth, gums and jaws and design dentures. Direct other workers to construct dentures. Fit, adjust and repair dentures. Construct dentures, if required. (Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 136 certified denturists (formerly known as certified dental mechanics) who were residing in Alberta and registered with the Board of Examiners to the Dental Mechanics Act in 1984.[1] About 54 percent of the denturists were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of denturists certified in Alberta decreased by 12.8 percent between 1982 and 1984. The provincial denturists-to-population ratio was 1:17,371 in 1984.

Some of the services performed by denturists, such as making complete dentures, are also provided by dental technicians. Similarly, some other functions of denturists, such as taking impressions for complete dentures, are also handled by dentists (see chapters on Dental Technicians and Dentists).

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[1] Source: The Board of Examiners to the Dental Mechanics Act. Number of denturists registered with the Board and residing in Alberta as of October 23, 1984. Number includes denturists who were also dental technicians.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Denturist Society of Alberta
201 Century Centre
2 Athabascan Avenue
Sherwood Park, Alberta
T8A 4E3

President: Mr. Raymond Hansen

b) Licensing, Registration, or Certification Authority:

Board of Examiners for Certified
Dental Mechanics
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Board Chairman: Mr. Elmer Abele

c) Legislation:

In December 1981, the Dental Mechanics Amendment Act was passed and assented to. This Act amended the Dental Mechanics Act by permitting dental mechanics to designate themselves as denturists.

Under the authority of the Dental Mechanics Act, all individuals who wish to practice as denturists in the province must be certified by and registered with the Board of Examiners for Certified Dental Mechanics, a provincial government licensing body. Registration with the Denturist Society of Alberta is voluntary.

The Board is responsible for regulating the conduct and discipline of all denturists and it is empowered to re-examine any denturist at any time and to suspend or cancel his certification if warranted. The Board also sets the educational qualifications required for certification as a denturist in Alberta.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DENTURISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	58,100	1:14,525
2 (Lethbridge)	8	117,900	1:14,738
3 (Pincher Creek)	3	38,300	1:12,767
4 (Hanna)	7	12,700	1: 1,814
5 (Drumheller)	9	40,900	1: 4,544
6 (Calgary)[3]	6	77,486	1:12,914
7 (Stettler)	4	42,500	1:10,625
8 (Red Deer)	6	134,300	1:22,383
9 (Banff)	2	23,600	1:11,800
10 (Camrose)	3	82,100	1:27,367
11 (Edmonton)[4]	3	118,752	1:39,584
12 (Fort McMurray)	2	92,100	1:46,050
13 (Whitecourt)	2	56,400	1:28,200
14 (Hinton)	1	27,000	1:27,000
15 (Grande Prairie)	2	137,800	1:68,900
Census Metropolitan Area of Calgary	29	619,814[5]	1:21,373
Census Metropolitan Area of Edmonton	45	682,648[5]	1:15,170
PROVINCIAL TOTAL	136	2,362,400	1:17,371

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[1] Source: The Board of Examiners to the Dental Mechanics Act. Number of denturists registered with the Board and residing in Alberta as of October 23, 1984. Number includes denturists who were also dental technicians.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DENTURISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered Personnel[1]	156	155	136
% Change in Number of Registered Personnel	3.3%	-0.7%	-12.3%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1:14,889	1:15,203	1:17,371

[1] Source: The Board of Examiners to the Dental Mechanics Act. Number of denturists registered with the Board and residing in Alberta.

[2] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are two routes that a person may take in order to become a denturist in Alberta. The first way is to apprentice for five years under the supervision of a certified denturist. During this time students are required to complete examinations at four levels conducted by the Board of Examiners for Certified Dental Mechanics.

The second way is to enrol in a two-year training program offered by the Northern Alberta Institute of Technology. Upon completion of this program, the graduate is required to apprentice for two years under the supervision of a certified denturist. During this time the graduates are required to complete examinations at four levels. There were 12 graduates from the denturist technology diploma program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAM FOR DENTURISTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
Northern Alberta Institute of Technology (Program length: 2 years)			
Enrolments:			
1st Year	18	18	18
2nd Year	16	19	19
Graduates:	10	9	12

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) **Continuing Education Programs:**

Five half-day seminars were sponsored by the Denturist Society of Alberta, as part of its continuing education program for its members.

DIETARY TECHNICIANS

I. OVERVIEW

Definition: Assist in the planning and supervision of food service programs in governmental, institutional and commercial establishment. Plan menus and diets, under direction of dietitian or nutritionist, to provide required food and nutrients to individuals and groups. Arrange work schedules and assist in supervision of those engaged in preparation and serving of meals. Purchase or requisition food, equipment and other supplies. Maintain food-cost-control and other operational records to assist in improving efficiency and quality of food service system. Inspect storage facilities and work areas to ensure observance of sanitation, safety and security standards. Maintain attendance and personnel records and assist with inventory of supplies and equipment.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Society of Dietary Technicians is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 242 dietary technicians practicing in Alberta in 1984.[1] Slightly over half of all dietary technicians were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial dietary technician-to-population ratio was 1:9,762 in 1984.

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Dietary Technicians
P.O. Box 3791, Station "D"
Edmonton, Alberta
T5L 4J8

or

Box 2353
Calgary, Alberta
T2P 2M6

President: Ms. Bonnie Anne Johnson

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

There is no legislation regulating dietary technicians in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DIETARY TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	58,100	1:11,620
2 (Lethbridge)	12	117,900	1: 9,825
3 (Pincher Creek)	8	38,300	1: 4,788
4 (Hanna)	4	12,700	1: 3,175
5 (Drumheller)	4	40,900	1:10,225
6 (Calgary)[3]	11	77,486	1: 7,044
7 (Stettler)	8	42,500	1: 5,313
8 (Red Deer)	16	134,300	1: 8,394
9 (Banff)	6	23,600	1: 3,933
10 (Camrose)	7	82,100	1:11,729
11 (Edmonton)[4]	5	118,752	1:23,750
12 (Fort McMurray)	5	92,100	1:18,420
13 (Whitecourt)	3	56,400	1:18,800
14 (Hinton)	1	27,000	1:27,000
15 (Grande Prairie)	20	137,800	1: 6,890
Census Metropolitan Area of Calgary	52	619,814[5]	1:11,920
Census Metropolitan Area of Edmonton	75	682,648[5]	1: 9,102
PROVINCIAL TOTAL	242	2,362,400	1: 9,762

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DIETARY TECHNICIANS IN ALBERTA 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	234[1]	245[2]	242[3]
% Change in Number of Practising Personnel	15.3%	4.7%	-1.2%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios: - Alberta	1: 9,926	1: 9,618	1: 9,762

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology both offer a two-year program for dietary technicians, leading to a diploma in dietary service technology. There were 50 graduates from the two programs in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAMS FOR DIETARY TECHNICIANS IN ALBERTA[1]

	1981-82	1982-83	1983-84
Northern Alberta Institute of Technology (Program length: 2 years)			
Enrolments:			
1st Year	31	31	26
2nd Year	24	23	29
Graduates:	23	20	26
Southern Alberta Institute of Technology (Program length: 2 years)			
Enrolments:			
1st Year	24	39	35
2nd Year	26	20	25
Graduates:	21	20	24
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	44	40	50

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

There were no continuing education programs offered by provincial post-secondary institutions in Alberta for dietary technicians in 1984. However, seminars were held by the Alberta Society of Dietary Technicians in Calgary and Edmonton.

DIETITIANS/NUTRITIONISTS

I. OVERVIEW

Definition: Dietitians

Plan and supervise food service programs in governmental, institutional and commercial establishments to provide nutritionally adequate quality food. Plan diets and menus and evaluate clients' acceptance. Plan and submit budget and manage and control operating costs. Establish and maintain standards of food production and service, sanitation, safety and security. Supervise workers and direct efficient use of personnel and equipment. Institute measures to improve efficiency and quality of food service system. Plan, conduct and evaluate orientation and in-service training programs. Determine food, equipment and supply requirements. Administer established personnel policies. Plan layout designs and determine equipment requirements for new or renovated food services facilities. Prepare material on nutritional value of foods, methods of preparation and recipes, if required.

Nutritionists

Provide consulting services to community and organize, plan and conduct programs concerning nutrition to assist in promotion of health and prevention of disease. Assess nutritional needs and available resources of community. Develop and implement community programs concerning nutrition. Advise health and other agencies on nutritional and food services standards of their food programs. Counsel individuals and families in nutritional principles, diet, food selection and economical buying practices. Interpret and evaluate current research relating to nutrition and food service systems management to public and to staff. Conduct or participate in in-service education. Plan, conduct and evaluate nutrition education programs for public. Prepare technical publications and publications for the public concerning food and nutrition. Plan, conduct and evaluate dietary studies and participate in studies of diseases with nutrition component. Plan or participate in funding programs and recommend budget. Manage and control financial resources.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 339 dietitians/nutritionists who were residing in Alberta and registered with the Alberta Dietitians Association (A.R.D.A.) in 1984.[1] Registration with the A.R.D.A. is not mandatory in order to practice in the province. Not all registered dietitians/nutritionists practice in the health care and social service sector. According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 227 dietitians and nutritionists employed in the health care and social service sector in 1984.[2]

About 83 percent of the registered dietitians/nutritionists were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of registered dietitians/nutritionists grew by 9.0 percent between 1982 and 1984, while the provincial population increased by 1.7 percent during the same period. The provincial registered dietitian/nutritionist-to-population ratio was 1: 6,969 in 1984.

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[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the A.R.D.A. and residing in Alberta as of April 30, 1984. Excludes inactive, honorary, and retired members.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Registered Dietitians Association
P.O. Box 3874, Station D
Edmonton, Alberta
T5L 4K1

President: Ms. Sandra Follett, R.D.

b) Licensing, Registration, or Certification Authority:

Alberta Registered Dietitians Association
P.O. Box 3874, Station D
Edmonton, Alberta
T5L 4K1

c) Legislation:

Currently there is no mandatory registration requirement of dietitians/nutritionists practising in the province. However, under the authority of the Registered Dietitians Act, individuals may register with the Alberta Registered Dietitians Association. Only those dietitians/nutritionists who are registered with the Association may use the title of "Registered Dietitian." Annual re-registration with the Association is required of dietitians/nutritionists in order to continue to use the title of "Registered Dietitian."

The A.R.D.A. is responsible for regulating the conduct and discipline of its members. The Universities Coordinating Council sets the educational qualifications required for registration with the A.R.D.A. In addition, the Registered Dietitians Act stipulates additional educational and experiential qualifications for membership in the Association.

III. PERSONNEL DATA

TABLE 1 NUMBER OF DIETITIANS/NUTRITIONISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	58,100	1:11,620
2 (Lethbridge)	8	117,900	1:14,738
3 (Pincher Creek)	2	38,300	1:19,150
4 (Hanna)	1	12,700	1:12,700
5 (Drumheller)	0	40,900	-
6 (Calgary)[3]	4	77,486	1:19,372
7 (Stettler)	1	42,500	1:42,500
8 (Red Deer)	15	134,300	1: 8,953
9 (Banff)	2	23,600	1:11,800
10 (Camrose)	2	82,100	1:41,050
11 (Edmonton)[4]	5	118,752	1:23,750
12 (Fort McMurray)	5	92,100	1:18,420
13 (Whitecourt)	0	56,400	-
14 (Hinton)	1	27,000	1:27,000
15 (Grande Prairie)	5	137,800	1:27,560
Census Metropolitan Area of Calgary	137	619,814[5]	1: 4,524
Census Metropolitan Area of Edmonton	146	682,648[5]	1: 4,676
PROVINCIAL TOTAL	339	2,362,400	1: 6,969

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[1] Source: Registered Dietitians Association. Number of dietitians/nutritionists registered with the Alberta Registered Dietitians Association and residing in Alberta as of April 30, 1984. Excludes inactive, honorary, and retired members.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR DIETITIANS/NUTRITIONISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered Personnel[1]	311	330	339
% Change in Number of Registered Personnel	10.3%	6.1%	2.7%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 7,468	1: 7,140	1: 6,969
- Western Canada[4]	-	1: 6,535	-
- Canada[5]	1: 5,781	1: 5,814	-

[1] Source: Alberta Registered Dietitians Association. Number of dietitians/nutritionists registered with the A.R.D.A. and residing in Alberta as of April 30, 1982, 1983, and 1984. Excludes inactive, honorary, and retired members.

[2] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Sources: (i) Rollcall 83. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. The British Columbia figures refer to personnel who were registered (registration is not compulsory) and practicing. The figures for Saskatchewan, Manitoba, and Alberta refer to personnel registered with their respective provincial professional associations.

[5] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Faculty of Home Economics at the University of Alberta offers a four-year baccalaureate degree program in food and nutrition. There were 22 graduates from the program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAM FOR DIETITIANS/NUTRITIONISTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	23	30	39
2nd Year	20	35	39
3rd Year	30	16	34
4th Year	27	41	32
Graduates	15	27	22

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

Five continuing education committees, operating regionally, offered between 8-12 education sessions, which were sponsored by the Alberta Registered Dietitians Association in 1984. Members could also attend programs offered by other associations for continuing education credit points.

EMERGENCY MEDICAL TECHNICIANS

I. OVERVIEW

Definition: An emergency attendant:

Gives emergency care to sick and injured persons at the scene of the accident or illness and during transport to the hospital. Assists with lifting of patient onto wheeled cart or stretcher and into and out of ambulance. Gives first aid such as mouth-to-mouth resuscitation, cardiac massage, administration of oxygen and application of bandages and splints. Assists with rescue work, if required. Performs duties of AMBULANCE DRIVER if required.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

The chapter on ambulance attendants in previous editions of this publication covered only personnel identified as "emergency medical technicians - paramedic." As a result of decisions made by the Health Disciplines Board in 1984 respecting ambulance attendants, these personnel will now be known as "emergency medical technicians" and will include both emergency medical technicians - paramedic (EMT-P) and emergency medical technicians - ambulance (EMT-A).

Emergency medical technicians - ambulance are ambulance attendants who have received training to provide emergency services at the basic life support level.[1] In Alberta, this means training at the EMT-A level provided at the Southern Alberta Institute of Technology.

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[1] "Basic Life Support is an emergency first aid procedure that consists of recognizing respiratory and cardiac arrest and starting the proper application of cardio-pulmonary resuscitation to maintain life until a victim recovers sufficiently to be transported or until advanced life support is available."
(American Heart Association, "Standards for cardio-pulmonary resuscitation and emergency cardiac care." Journal of the American Medical Association, 1974, 227, 841.)

Emergency medical technicians - paramedic are ambulance attendants who have received training to provide emergency services at the advanced life support level.[2] In Alberta this means training at the EMT-P level provided at the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology.

In Alberta, municipalities have the power to set the level of ambulance services beyond a legislated minimum standard. Some municipalities have established advanced life support level ambulance services and others have not. The municipalities which have established advanced life support level ambulance services include: Airdrie, Calgary, Edmonton, Fort McMurray, Grande Prairie, High River, Innisfail, Medicine Hat, and St. Albert. This factor partly accounts for the very uneven distribution of emergency paramedic personnel in Alberta.

In 1984, there were 657 salaried and 245 volunteer emergency medical technicians practicing in the province, according to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee.[3] The provincial emergency medical technician-to-population ratio was 1:2,619. Salaried personnel refer to those who received a salary. Volunteer personnel refer to those who did not receive a salary but might have received a stipend, standby fee, or honorarium. It should be noted that there were additional ambulance attendants who had lower levels of training than emergency medical technicians.

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[2] "Advanced life support for the patient in cardiac arrest consists of the following elements: basic life support, use of adjunctive equipment for ventilation and circulation, cardiac monitoring for dysrhythmia recognition and control, defibrillation, establishment and maintenance of an intravenous infusion line, employment of definitive therapy, including drug administration ... stabilization of the patient's condition and transportation with continuous monitoring."
(American Heart Association, "Standard for cardio-pulmonary resuscitation and emergency cardiac care." Journal of the American Medical Association, 1974, 227, 852.)

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta". Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

Of the 657 salaried emergency medical technicians, 444 had EMT-A level of training and 213 had EMT-P level of training. Of the 245 volunteer emergency medical technicians, 222 had EMT-A level of training and 23 had EMT-P level of training. The majority of the volunteer emergency medical technicians were part-time personnel.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Registered Emergency Medical Technicians
Association of Alberta
P.O. Box 63
Redwater, Alberta
T0A 2W0

President: Ms. Joyce Holt

b) Licensing, Registration, or Certification Authority:

Alberta Health Disciplines Board.

c) Legislation:

There are two pieces of legislation which deal with ambulance services and ambulance attendants.

The Motor Transport Act requires that every "Class A Ambulance" in the province must be staffed by at least one qualified attendant who holds at least a St. John's Ambulance Certificate.

The Municipal Government Act allows municipalities to provide ambulance services which exceed the minimum standards set forth in the Motor Transport Act. Some municipalities have passed ambulance service regulations under this Act.

In 1982, the Health Disciplines Board recommended to the Minister responsible for Professions and Occupations that the discipline of emergency medical technicians - paramedic be designated under the Health Disciplines Act. In 1984, the Board recommended to the Minister that the discipline of emergency medical technician - ambulance be a designated health discipline. The Board also recommended that both emergency medical technicians - paramedic and emergency medical technicians - ambulance be regulated under the same health discipline committee. On November 13, 1984, the designation of Emergency Medical Technician - Paramedic was amended to Emergency Medical Technicians so that both groups, EMT-P and EMT-A, could be regulated together. On December 21, 1984, the Minister responsible for Professions and Occupations established a committee known as the Emergency Medical Technician Committee. This Committee, under the supervision of the Health Disciplines Board, will be developing regulations for both disciplines.

III. PERSONNEL DATA

TABLE 1 NUMBER OF EMERGENCY MEDICAL TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	11	58,100	1: 5,282
2 (Lethbridge)	58	117,900	1: 2,033
3 (Pincher Creek)	11	38,300	1: 3,482
4 (Hanna)	28	12,700	1: 454
5 (Drumheller)	26	40,900	1: 1,573
6 (Calgary)[3]	74	77,486	1: 1,047
7 (Stettler)	27	42,500	1: 1,574
8 (Red Deer)	81	134,300	1: 1,658
9 (Banff)	27	23,600	1: 874
10 (Camrose)	20	82,100	1: 4,105
11 (Edmonton)[4]	45	118,752	1: 2,639
12 (Fort McMurray)	69	92,100	1: 1,335
13 (Whitecourt)	25	56,400	1: 2,256
14 (Hinton)	12	27,000	1: 2,250
15 (Grande Prairie)	88	137,800	1: 1,566
Census Metropolitan Area of Calgary	166	619,814[5]	1: 3,734
Census Metropolitan Area of Edmonton	134	682,648[5]	1: 5,094
PROVINCIAL TOTAL	902	2,362,400	1: 2,619

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR EMERGENCY MEDICAL TECHNICIANS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered or Practicing Personnel	164[1]	240[2]	902[3]
% Change in Number of Registered or Practicing Personnel	40.2%	N/A	N/A
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1:14,163	1: 9,819	1: 2,619

[1] Source: Registered Emergency Paramedic Association of Alberta. Number of emergency paramedics registered with the Registered Emergency Paramedic Association of Alberta and residing in Alberta as of August 31, 1982. Excludes honorary, inactive and retired members.

[2] Source: "September 30, 1983 Survey of Employees of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: The 1984 figure is substantially larger because under the Health Disciplines Act, the occupation of emergency medical technician includes both EMT-P and EMT-A personnel. Therefore the 1983 data which included only paramedics, and the 1984 data are not comparable.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Southern Alberta Institute of Technology and the Northern Alberta Institute of Technology offer a two-year training program for emergency medical technicians - paramedic. There were 52 graduates from the two programs in 1983-84. The Southern Alberta Institute of Technology also offers a training program for emergency medical technicians - ambulance. There were 263 graduates from this program in 1983-84 including graduates from outreach programs.

TABLE 3 BASIC EDUCATION PROGRAMS FOR EMERGENCY MEDICAL TECHNICIANS (PARAMEDIC) IN ALBERTA[1]

	1981-82	1982-83	1983-84
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:[2]			
1st Year	30	25	17
2nd Year	-	25	24
Graduates:	-	25	24
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	32	28	30
2nd Year	31	29	26
Graduates:	29	32	28
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	29	57	52

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

[2] This program began in 1981-82.

b) **Continuing Education Programs:**

Continuing Education programs are available through the Southern Alberta Institute of Technology, Red Deer College, Lakeland College, and in-service training programs. As well, the Registered Emergency Paramedic Association of Alberta offers re-certification examinations and an educational seminar prior to their annual meeting.

HEALTH RECORD ADMINISTRATORS

I. OVERVIEW

Definition: Compile and maintain medical records and statistics of hospital and clinic patients. Review clinical records for completeness and contact medical personnel to obtain missing data. Code, index and file records of diagnoses, diseases and treatments. Compile statistics, such as, reports on admissions, births, deaths, transfers and discharges. Release medical information to staff and authorized government agencies, insurance companies, physicians, hospitals and medical information and research centres. May brief and transcribe records. May testify in court to authenticate medical records.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Health Record Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 162 health record administrators practicing in Alberta in 1984.[1] About 60 percent of all health record administrators were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial health record administrator-to-population ratio was 1:14,583 in 1984.

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Ms. Sandy Moffatt

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

There is no legislation regulating health record administrators in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF HEALTH RECORD ADMINISTRATORS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	2	58,100	1:29,050
2 (Lethbridge)	8	117,900	1:14,738
3 (Pincher Creek)	2	38,300	1:19,150
4 (Hanna)	2	12,700	1: 6,350
5 (Drumheller)	3	40,900	1:13,633
6 (Calgary)[3]	2	77,486	1:38,743
7 (Stettler)	2	42,500	1:21,250
8 (Red Deer)	9	134,300	1:14,922
9 (Banff)	1	23,600	1:23,600
10 (Camrose)	10	82,100	1: 8,210
11 (Edmonton)[4]	4	118,752	1:29,688
12 (Fort McMurray)	5	92,100	1:18,420
13 (Whitecourt)	4	56,400	1:14,100
14 (Hinton)	1	27,000	1:27,000
15 (Grande Prairie)	9	137,800	1:15,311
Census Metropolitan Area of Calgary	27	619,814[5]	1:22,956
Census Metropolitan Area of Edmonton	71	682,648[5]	1: 9,615
PROVINCIAL TOTAL	162	2,362,400	1:14,583

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR HEALTH RECORD ADMINISTRATORS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	138[1]	144[2]	162[3]
% Change in Number of Practicing Personnel	4.5%	4.3%	12.5%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratio:			
- Alberta	1:16,831	1:16,365	1:14,583
- Canada[6]	1:11,390	1:10,009	-

[1] Source: "September 30, 1982 Survey of Major Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau Statistics, October 1984.

[6] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Northern Alberta Institute of Technology offers a two-year program leading to a health records administrator diploma. There were 14 graduates from the program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAM FOR HEALTH RECORD ADMINISTRATORS IN ALBERTA[1]

	1981-82	1982-83	1983-84
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	15	14	8
2nd Year	15	14	14
Graduates:	15	12	14

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The education committee of the Alberta Health Record Association sponsored four continuing education programs for its members in 1984.

HEALTH RECORD TECHNICIANS

I. OVERVIEW

Definition: Assist Health Record Administrators, carry out many technical activities within the medical record department, typing medical information, preparing statistical reports, reviewing medical records, supervising clerical personnel, working with doctors, nurses and other health professionals on medical research projects.

(Source: Health Manpower Provincial Report, Manitoba, 1982. Winnipeg, Manitoba: Manitoba Department of Health, 1982)

Since registration with the Alberta Health Record Association is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 270 health record technicians practicing in Alberta in 1984.[1] About 43 percent of the health record technicians were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial health record technician-to-population ratio was 1:8,750 in 1984.

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Health Record Association
P.O. Box 1752
Edmonton, Alberta
T5J 2P1

President: Ms. Sandy Moffat

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

There is no legislation regulating health record technicians in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF HEALTH RECORD TECHNICIANS AND PERSONNEL-TO POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	58,100	1:19,367
2 (Lethbridge)	9	117,900	1:13,100
3 (Pincher Creek)	9	38,300	1: 4,256
4 (Hanna)	4	12,700	1: 3,175
5 (Drumheller)	4	40,900	1:10,225
6 (Calgary)[3]	7	77,486	1:11,069
7 (Stettler)	12	42,500	1: 3,542
8 (Red Deer)	24	134,300	1: 5,596
9 (Banff)	9	23,600	1: 2,622
10 (Camrose)	16	82,100	1: 5,131
11 (Edmonton)[4]	8	118,752	1:14,844
12 (Fort McMurray)	10	92,100	1: 9,210
13 (Whitecourt)	16	56,400	1: 3,525
14 (Hinton)	2	27,000	1:13,500
15 (Grande Prairie)	21	137,800	1: 6,562
Census Metropolitan Area of Calgary	54	619,814[5]	1:11,478
Census Metropolitan Area of Edmonton	62	682,648[5]	1:11,010
PROVINCIAL TOTAL	270	2,362,400	1: 8,750

---

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR HEALTH RECORD TECHNICIANS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	277[1]	319[2]	270[3]
% Change in Number of Practicing Personnel	9.5%	15.2%	-15.4%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratio:			
- Alberta	1: 8,385	1: 7,387	1: 8,750

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions". Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The Southern Alberta Institute of Technology (S.A.I.T.) offers a 12-month health record certificate program. Ten months of the program are spent at S.A.I.T., and the remaining two months are spent in a hospital practicum. There were 16 graduates from the program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAM FOR HEALTH RECORD TECHNICIANS IN ALBERTA[1]

	1981-82	1982-83	1983-84
Southern Alberta Institute of Technology (Program Length: 12 months)			
Enrolments:	23	22	25
Graduates:	16	16	16

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The education committee of the Alberta Health Record Association sponsored four continuing education programs for its members in 1984.

MEDICAL LABORATORY TECHNOLOGISTS

I. OVERVIEW

Definition: Perform medical laboratory tests, procedures, experiments and analyses for the diagnosis, treatment and prevention of disease. Conduct chemical analysis of blood, urine, cerebro-spinal and other body fluids to ascertain normal and abnormal constituents. Study blood cells, their numbers, morphological characteristics and coagulation factors related to various physiological and pathological conditions. Prepare tissue sections for microscopic examination using fixation, imbedding, cutting and staining techniques to demonstrate special cellular tissue elements or other characteristics. Study micro-organisms which cause disease and their effect upon the human body, using a variety of microscopic and macroscopic techniques. Perform blood group, type and compatability tests for transfusion purposes. Investigate responses of body to foreign cells or agents.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Canadian Society of Laboratory Technologists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 1,957 medical laboratory technologists practicing in Alberta in 1984.[1] About 78 percent of the medical laboratory technologists were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial medical laboratory technologist-to-population ratio was 1:1,207 in 1984.

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

Some of the basic laboratory services provided by medical laboratory technologists are also provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Medical Laboratory Technologists
Box 4165
Edmonton, Alberta
T6E 4T2

President: Ms. Maryanne Ingram

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

There is no legislation regulating medical laboratory technologists in Alberta at present.

III. PERSONNEL DATA

TABLE 1A NUMBER OF MEDICAL LABORATORY TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	34	58,100	1: 1,709
2 (Lethbridge)	90	117,900	1: 1,310
3 (Pincher Creek)	13	38,300	1: 2,946
4 (Hanna)	1	12,700	1:12,700
5 (Drumheller)	11	40,900	1: 3,718
6 (Calgary)[3]	16	77,486	1: 4,843
7 (Stettler)	15	42,500	1: 2,833
8 (Red Deer)	91	134,300	1: 1,476
9 (Banff)	14	23,600	1: 1,686
10 (Camrose)	35	82,100	1: 2,346
11 (Edmonton)[4]	19	118,752	1: 6,250
12 (Fort McMurray)	34	92,100	1: 2,709
13 (Whitecourt)	17	56,400	1: 3,318
14 (Hinton)	6	27,000	1: 4,500
15 (Grande Prairie)	39	137,800	1: 3,533
Census Metropolitan Area of Calgary	638	619,814[5]	1: 971
Census Metropolitan Area of Edmonton	884	682,648[5]	1: 772
PROVINCIAL TOTAL	1,957	2,362,400	1: 1,207

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 1B NUMBER OF MEDICAL LABORATORY TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1984

Community by Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	638	619,814	1: 971
Census Metropolitan Area of Edmonton	884	682,648	1: 772
Between 10,000 and 60,000			
Airdrie	2	10,431	1: 5,216
Camrose	12	12,571	1: 1,048
Fort McMurray	22	35,352	1: 1,607
Grande Prairie	18	24,411	1: 1,356
Leduc	2	12,471	1: 6,236
Lethbridge	76	58,586	1: 771
Medicine Hat	33	41,493	1, 1,257
Red Deer	78	51,070	1: 655
Spruce Grove	5	11,569	1: 2,314
Wetaskiwin	7	10,022	1: 1,432
Between 5,000 and 10,000			
Brooks	7	9,421	1: 1,346
Drumheller	7	6,671	1: 953
Edson	3	7,110	1: 2,370
High River	7	5,114	1: 731
Hinton	3	8,904	1: 2,968
Innisfail	1	5,435	1: 5,435
Lacombe	2	5,954	1: 2,977
Lloydminster	8	9,226	1: 1,153
Peace River	7	6,043	1: 863
Ponoka	3	5,221	1: 1,740
Rocky Mountain House	3	5,126	1: 1,709
Stettler	5	5,136	1: 1,027
Stony Plain	3	5,291	1: 1,764
Taber	5	6,384	1: 1,277
Vegreville	4	5,251	1: 1,313
Whitecourt	3	5,408	1: 1,803
Under 5,000	109	690,088	1: 6,331
TOTAL	1,957	2,362,400	1: 1,207

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	1,863[1]	1,928[2]	1,957[3]
% Change in Number of Practicing Personnel	-1.7%	3.5%	1.5%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1:1,247	1:1,222	1:1,207
- Western Canada[6]	-	1:1,130	-
- Canada[7]	1:1,327	1:1,353	-

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Sources: (i) Rollcall 83. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning Directorate, Manitoba Health, Winnipeg, Manitoba. (iii) Saskatchewan Health Manpower Report 1982-1984. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee. The figure for British Columbia refers to personnel who were registered (registration is not mandatory) and practicing. The Alberta figure refers to practicing personnel, while the figures for Manitoba and Saskatchewan refer to personnel registered with their respective provincial professional associations.

[7] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology offer medical laboratory technology diploma programs. Both programs are two years in length. There were 98 graduates from the two programs in 1983-84.

The University of Alberta offers a four-year B.Sc. program in medical laboratory science. There were 14 graduates from the program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAMS FOR MEDICAL LABORATORY TECHNOLOGISTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
A. DIPLOMA PROGRAMS			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	72	76	73
2nd Year	45	62	67
Graduates:	41	62	66
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	48	47	45
2nd Year	44	36	32
Graduates:	38	31	32
PROVINCIAL TOTAL			
Number of Diploma Programs: 2			
Graduates:	79	93	98
B. BACCALAUREATE PROGRAM			
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	35	35	35
2nd Year	20	25	26
3rd Year	19	17	20
4th Year	18	18	14
Graduates:	18	18	14

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

Continuing education programs for medical laboratory technologists were offered by the Northern Alberta Institute of Technology, the Southern Alberta Institute of Technology, and the Division of Medical Laboratory Science at the University of Alberta. The Alberta Society of Medical Technologists organized various seminars, workshops, and evening courses throughout the province. These programs varied in length and included relevant topics in all disciplines of medical technology.

OCCUPATIONAL THERAPISTS

I. OVERVIEW

Definition: Plan and carry out treatment programs based on activities such as work, education and recreation to rehabilitate physically and mentally disabled persons. Administer test and observe patients to assess their emotional, mental and physical capacities. Plan and direct programs in manual and creative arts, industrial and vocational skills, recreational activities, remedial games, cultural and educational interests and play activities for children. Conduct group programs to assist patients in building self-confidence and in adjusting to family and community. Train handicapped patients in self-care and daily living activities. Advise and instruct patients on specially-adapted household equipment and furnishings. Assess patient's vocational potential and provide work adjustment and actual work experience. Participate in testing and training of patients with perceptual motor problems and provide training for children with learning disabilities. Record patient's activities, response and progress. Attend meetings of rehabilitation team and seminars, workshops and courses on occupational therapy. Supervise and instruct occupational therapy students and auxiliary personnel assigned to department.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Registered Occupational Therapists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 266 occupational therapists practicing in Alberta in 1984.[1] About 85 percent of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial occupational therapist-to-population ratio was 1:8,881 in 1984. It should be noted, however, that the March 31, 1984 survey was not comprehensive and not all occupational therapists in the province were counted. The most recent comprehensive manpower survey was conducted on September 30, 1983. According to this survey, there were 315 occupational therapists practicing in the province as of September 30, 1983.[2]

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Registered
Occupational Therapists
c/o Faculty of Rehabilitation Medicine
University of Alberta
310 Corbett Hall
Edmonton, Alberta
T6G 2G4

President: Ms. Judy Lee

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

There is no legislation regulating occupational therapists in Alberta at present.

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[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

III. PERSONNEL DATA

TABLE 1 NUMBER OF OCCUPATIONAL THERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	58,100	1:11,620
2 (Lethbridge)	7	117,900	1:16,843
3 (Pincher Creek)	2	38,300	1:19,150
4 (Hanna)	0	12,700	-
5 (Drumheller)	1	40,900	1:40,900
6 (Calgary)[3]	2	77,486	1:38,743
7 (Stettler)	1	42,500	1:42,500
8 (Red Deer)	8	134,300	1:16,788
9 (Banff)	0	23,600	-
10 (Camrose)	0	82,100	-
11 (Edmonton)[4]	3	118,752	1:39,584
12 (Fort McMurray)	2	92,100	1:46,050
13 (Whitecourt)	3	56,400	1:18,800
14 (Hinton)	1	27,000	1:27,000
15 (Grande Prairie)	4	137,800	1:34,450
Census Metropolitan Area of Calgary	95	619,814[5]	1: 6,524
Census Metropolitan Area of Edmonton	132	682,648[5]	1: 5,172
PROVINCIAL TOTAL	266	2,362,400	1: 8,881

---

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OCCUPATIONAL THERAPISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	288[1]	315[2]	266[3]
% Change in Number of Practicing Personnel	25.8%	9.4%	N/A
Population (Alberta)[4]	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 8,065	1: 7,481	1: 8,881
- Western Canada[6]	-	1: 8,672	-
- Canada[7]	1:12,632	1:11,671	-

---

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: The discrepancy between the 1983 and 1984 figures is mainly due to the fact that the 1984 survey is not a comprehensive survey. Therefore, not all practicing occupational therapists in the province were counted in 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Sources: (i) Rollcall 83. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

[7] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

A four-year baccalaureate degree program in occupational therapy is offered at the University of Alberta. There were 42 graduates from the program in 1983-84.

Under an interprovincial training agreement, four training places per year are reserved for Saskatchewan students in the occupational therapy program at the University of Alberta.

TABLE 3 BASIC EDUCATION PROGRAM FOR OCCUPATIONAL THERAPISTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	Pre-Professional Yr	Pre-Professional Yr	Pre-Professional Yr
2nd Year	40	41	41
3rd Year	39	38	37
4th Year	35	44	49
Graduates:	30	40	42

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The Department of Occupational Therapy at the University of Alberta offered credit courses for diploma level occupational therapists who were working toward their baccalaureate degree.

The Alberta Association of Registered Occupational Therapists sponsored informal continuing education programs in the form of seminars, workshops, and short courses on topics related to occupational therapy. The University of Calgary also offered a number of continuing education courses for occupational therapists.

OPHTHALMIC DISPENSERS

I. OVERVIEW

Definition: An ophthalmic dispenser supplies, prepares, or dispenses ophthalmic appliances; interprets prescriptions from ophthalmologists or optometrists in respect of ophthalmic appliances; fits, adjusts and adapts ophthalmic appliances to the needs of the intended wearer in accordance with a prescription from an ophthamologist or optometrist, or without a prescription where lenses are duplicated with no change in their refractive value.

(Source: The Ophthalmic Dispensers Act, RSA 1980, Ch. 0-8)

There were 292 ophthalmic dispensers who were residing in Alberta and registered with the Alberta Guild of Ophthalmic Dispensers in 1984.[1] About 75 percent of the ophthalmic dispensers were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of ophthalmic dispensers registered in Alberta grew by 9.0 percent between 1982 and 1984, while the provincial population increased by 1.7 percent during the same period. The provincial ophthalmic dispenser-to-population ratio was 1:8,090 in 1984.

Most of the services provided by ophthalmic dispensers are also provided by optometrists (see chapter on Optometrists).

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[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of November 26, 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Guild of Ophthalmic Dispensers
#250, 10830 Jasper Avenue
Edmonton, Alberta
T5J 2B3

President: Mr. William Carmichael

b) Licensing, Registration, or Certification Authority:

Ophthalmic Dispensers Examining Board
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

and

Alberta Guild of Ophthalmic Dispensers
#250, 10830 Jasper Avenue
Edmonton, Alberta
T5T 2B3

c) Legislation:

Under the authority of the Ophthalmic Dispensers Act, all individuals who wish to practice as ophthalmic dispensers must apply for and receive a certificate of competency from the Ophthalmic Dispensers Examining Board, a provincial government certification body. Successful applicants must register with the Alberta Guild of Ophthalmic Dispensers. Annual re-registration is required of all ophthalmic dispensers in order to continue to practice in Alberta. The Ophthalmic Dispensers Examining Board also issues special certificates to practitioners who dispense contact lenses.

The Board stipulates standards of competency and proficiency for members of the Guild. The Guild is responsible for regulating the conduct and discipline of its members, but the Ophthalmic

Dispensers Examining Board is also empowered to review matters of competency. The Board sets the educational qualifications required for a certificate of competency or a special certificate of competency in dispensing contact lenses and for registration with the Guild. Applicants are required to pass examinations set by the Board.

III. PERSONNEL DATA

TABLE 1 NUMBER OF OPHTHALMIC DISPENSERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	10	58,100	1: 5,810
2 (Lethbridge)	17	117,900	1: 6,935
3 (Pincher Creek)	0	38,300	-
4 (Hanna)	0	12,700	-
5 (Drumheller)	1	40,900	1:40,900
6 (Calgary)[3]	4	77,486	1:19,372
7 (Stettler)	1	42,500	1:42,500
8 (Red Deer)	14	134,300	1: 9,593
9 (Banff)	0	23,600	-
10 (Camrose)	6	82,100	1:13,683
11 (Edmonton)[4]	8	118,752	1:14,844
12 (Fort McMurray)	2	92,100	1:46,050
13 (Whitecourt)	1	56,400	1:56,400
14 (Hinton)	1	27,000	1:27,000
15 (Grande Prairie)	7	137,800	1:19,686
Census Metropolitan Area of Calgary	97	619,814[5]	1: 6,390
Census Metropolitan Area of Edmonton	123	682,648[5]	1: 5,550
PROVINCIAL TOTAL	292	2,362,400	1: 8,090

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[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers and residing in Alberta as of November 26, 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OPHTHALMIC DISPENSERS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered Personnel[1]	268	277	292
% Change in Number of Registered Personnel	6.3%	3.4%	5.1%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 8,667	1: 8,507	1: 8,090
- Canada[4]	1: 8,467	1: 8,116	-

[1] Source: Alberta Guild of Ophthalmic Dispensers. Number of ophthalmic dispensers registered with the Alberta Guild of Ophthalmic Dispensers.

[2] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics October, 1984.

[4] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for ophthalmic dispensers in Alberta. Most ophthalmic dispensers are trained on-the-job and through correspondence courses offered by the Canadian Guild of Ophthalmic Dispensers.

Beginning in 1980, an individual must have completed the Canadian Guild of Ophthalmic Dispensers correspondence course and have had three years of experience working in an optical laboratory or optical dispensary before taking the examinations of the Ophthalmic Dispensers Examining Board. Previously, individuals with five years of experience were eligible to take these examinations without completing the correspondence course.

Commencing in 1984, an applicant of the ophthalmic dispensers correspondence course must attend at least seven out of ten classroom lectures in either Calgary or Edmonton. Should the applicant reside more than 300 km. from either city, attendance at only four out of ten lectures is required.

b) **Continuing Education Programs:**

There were no continuing education programs for ophthalmic dispensers offered by educational institutions in Alberta in 1984. However, 10-12 lectures were offered at the annual convention of the professional association.

OPTOMETRISTS

I. OVERVIEW

Definition: A person engaged in the practice of optometry.

"Practice of optometry" means:

(i) the examination of the human eye, and to determine the presence of vision problems,

(ii) the prescribing and adapting of lenses, frames, mountings, contact lenses or other aids and the utilization of vision training, to preserve, restore and enhance vision efficiency;

(Source: Optometry Act, RSA 1980)

There were 187 optometrists who were residing in Alberta and registered with the Alberta Optometric Association (A.O.A.) in 1984.[1] About 65 percent of the optometrists were located in the Census Metropolitan Areas of Calgary and Edmonton. Some optometrists in the larger urban centers operate satellite offices in neighboring rural areas and smaller centers throughout the province.

The number of optometrists registered in Alberta decreased by 2.1 per cent between 1982 and 1984, while the provincial population increased by 1.7 percent during the same period. The provincial optometrist-to-population ratio was 1: 12,633 in 1984.

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[1] Source: Alberta Optometric Association. Number of optometrists registered with the A.O.A. and residing in Alberta as of October 31, 1984. Excludes honorary, inactive, and retired members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Optometric Association
No. 2, The Professional Centre
9333 - 50 Street
Edmonton, Alberta
T6B 2L5

Executive Director: Mr. Adrian Berry

b) Licensing, Registration, or Certification Authority:

Board of Examiners in Optometry
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

and

Alberta Optometric Association
No. 2, The Professional Centre
9333 - 50 Street
Edmonton, Alberta
T6B 2L5

c) Legislation:

Under the authority of the Optometry Act, all individuals who wish to practice as optometrists must apply for and receive a Certificate of Approval for Registration from the Board of Examiners in Optometry, a provincial government certification body. Successful applicants must register with the Alberta Optometric Association. Annual re-registration is required of all optometrists who wish to continue to practice in Alberta.

The A.O.A. is responsible for regulating the conduct and discipline of its members. The Board of Examiners in Optometry sets the educational qualifications and conducts both written and oral examinations to determine eligibility for registration with the Alberta Optometric Association.

III. PERSONNEL DATA

TABLE 1A NUMBER OF OPTOMETRISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	58,100	1: 14,525
2 (Lethbridge)	13	117,900	1: 9,069
3 (Pincher Creek)	1	38,300	1: 38,300
4 (Hanna)	1	12,700	1: 12,700
5 (Drumheller)	0	40,900	-
6 (Calgary)[3]	5	77,486	1: 15,497
7 (Stettler)	2	42,500	1: 21,250
8 (Red Deer)	18	134,300	1: 7,461
9 (Banff)	1	23,600	1: 23,600
10 (Camrose)	4	82,100	1: 20,525
11 (Edmonton)[4]	3	118,752	1: 39,584
12 (Fort McMurray)	4	92,100	1: 23,025
13 (Whitecourt)	4	56,400	1: 14,100
14 (Hinton)	1	27,000	1: 27,000
15 (Grande Prairie)	5	137,800	1: 27,560
Census Metropolitan Area of Calgary	61	619,814[5]	1: 10,161
Census Metropolitan Area of Edmonton	60	682,648[5]	1: 11,377
PROVINCIAL TOTAL	187	2,362,400	1: 12,633

[1] Source: Alberta Optometric Association. Number of optometrists registered with the A.O.A. and residing in Alberta as of October 31, 1984. Excludes honorary, inactive, and retired members.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 1B NUMBER OF OPTOMETRISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1984

Community by Size	Number Registered[1]	Population[2]	Optometrist-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	61	619,814	1: 10,161
Census Metropolitan Area of Edmonton	60	682,648	1: 11,377
Between 10,000 and 60,000			
Airdrie	2	10,431	1: 5,216
Camrose	2	12,751	1: 6,375
Fort McMurray	3	35,352	1: 11,784
Grande Prairie	5	24,411	1: 4,882
Leduc	1	12,471	1: 12,471
Lethbridge	12	58,585	1: 4,882
Medicine Hat	4	41,493	1: 10,373
Red Deer	12	51,070	1: 4,256
Spruce Grove	1	11,569	1: 11,569
Wetaskiwin	2	10,022	1: 5,011
Between 5,000 and 10,000			
Brooks	0	9,421	-
Drumheller	0	6,671	-
Edson	0	7,110	-
High River	2	5,114	1: 2,557
Hinton	1	8,904	1: 8,904
Innisfail	1	5,435	1: 5,435
Lacombe	1	5,954	1: 5,954
Lloydminster	1	9,226	1: 9,226
Peace River	0	6,043	-
Ponoka	3	5,221	1: 1,740
Rocky Mountain House	1	5,126	1: 5,126
Stettler	1	5,136	1: 5,136
Stony Plain	0	5,291	-
Taber	1	6,384	1: 6,384
Vegreville	1	5,251	1: 5,251
Whitecourt	4	5,408	1: 1,352
Under 5,000	5	690,088	1:138,018
TOTAL	187	2,362,400	1: 12,633

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[1] Source: Alberta Optometric Association. Number of optometrists registered with the A.O.A. and residing in Alberta as of October 31, 1984. Excludes honorary, inactive, and retired members.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, Edmonton, Alberta, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR OPTOMETRISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered Personnel[1]	191	197	187
% Change in Number of Registered Personnel	2.1%	3.1%	-5.1%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 12,161	1: 11,962	1: 12,633
- Western Canada[4]	-	1: 12,771	-
- Canada[5]	1: 10,400	1: 10,391	-

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[1] Source: Alberta Optometric Association. Number of optometrists registered with the A.O.A. and residing in Alberta. Excludes honorary, inactive, and retired members.

[2] Source: *Alberta Statistical Review* (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Sources: (i) *Rollcall 83*. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) *Saskatchewan Health Manpower Report, 1982-84*. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to optometrists registered with their respective provincial professional associations.

[5] Source: *Canada Health Manpower Inventory, 1984*. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There is no training program for optometrists in Alberta. However, Alberta, Saskatchewan, and Manitoba have had an inter-provincial training agreement with the School of Optometry at the University of Waterloo and the Government of Ontario since 1976. Under this agreement, the three Western provinces annually purchase 13 training places (seven places for Alberta; three places for Saskatchewan; and three places for Manitoba) in the four-year program at the University of Waterloo.

In 1984 Alberta had a total of 29 students enrolled in the four year training program at the University of Waterloo under the current agreement. In September 1981 the agreement with the University of Waterloo and the Government of Ontario was renewed for a further five-year period. Pre-requisite for admission into the School of Optometry is two years of pre-optometry training (or equivalent courses in the sciences, including physics, mathematics, biology, zoology, chemistry, and psychology).

In addition to the University of Waterloo, a program in optometry is offered in French at the University of Montreal. The Western provinces have no inter-provincial training agreements with the University of Montreal.

b) Continuing Education Programs:

No continuing education programs for optometrists were offered by provincial educational institutions in 1984. However, six educational seminars were sponsored by the Alberta Optometric Association. Each of these seminars was of the nature and length to enable those who attended to obtain the 12 hours of continuing education required of each member each year. Two workshops were provided by other agencies.

PHARMACISTS

I. OVERVIEW

Definition: Compound and dispense prescribed pharmaceuticals and related preparations. Prepare or supervise preparation of liquid medicines, ointments, powders, pills and other medications. Check prescriptions for overdoses and drug interactions. Weigh, measure and mix drugs and other medicinal compounds and fill bottles and capsules with correct quantity and composition of preparation. Store and preserve biologicals, vaccines, serums and other drugs to prevent deterioration. Dispense medical and surgical products for internal and external use as prescribed. Maintain patient medication profiles and record prescriptions dispensed and poisons and narcotics issued. Order and maintain stock of pharmaceutical supplies. Provide information on uses and effects of medicaments. Sell non-prescription drugs, sick-room supplies, toiletries, cosmetics, lotions and other commercial products.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 1,872 pharmacists who were residing in Alberta and registered with the Alberta Pharmaceutical Association (A.P.A.) in 1984.[1] About 63 percent of the pharmacists were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of pharmacists registered in Alberta grew by 6.1 percent between 1982 and 1984 while the provincial population increased by 1.7 percent during the same period. The provincial pharmacist-to-population ratio was 1: 1,262 in 1984.

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1984. Excludes inactive, honorary, and retired members.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Pharmaceutical Association
10615 - 124 Street
Edmonton, Alberta
T5N 1S5

Registrar-Treasurer: Mr. Larry J. Shipka

b) Licensing, Registration, or Certification Authority:

Alberta Pharmaceutical Association
10615 - 124 Street
Edmonton, Alberta
T5N 1S5

c) Legislation:

Under the authority of the Pharmaceutical Association Act, all individuals who wish to practice as pharmacists must register with the A.P.A. Annual re-registration with the Association is required of all pharmacists in order to continue to practice in Alberta.

The Alberta Pharmaceutical Association is also responsible for regulating the conduct and discipline of its members. The Pharmaceutical Association Act sets the educational qualifications required for registration with the A.P.A.

III. PERSONNEL DATA

TABLE 1A NUMBER OF PHARMACISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	43	58,100	1: 1,351
2 (Lethbridge)	87	117,900	1: 1,355
3 (Pincher Creek)	23	38,300	1: 1,665
4 (Hanna)	9	12,700	1: 1,411
5 (Drumheller)	33	40,900	1: 1,239
6 (Calgary)[3]	51	77,486	1: 1,519
7 (Stettler)	28	42,500	1: 1,518
8 (Red Deer)	99	134,300	1: 1,357
9 (Banff)	21	23,600	1: 1,124
10 (Camrose)	61	82,100	1: 1,346
11 (Edmonton)[4]	60	118,752	1: 1,979
12 (Fort McMurray)	52	92,100	1: 1,771
13 (Whitecourt)	35	56,400	1: 1,611
14 (Hinton)	13	27,000	1: 2,077
15 (Grande Prairie)	71	137,800	1: 1,941
Census Metropolitan Area of Calgary	464	619,814[5]	1: 1,336
Census Metropolitan Area of Edmonton	722	682,648[5]	1: 945
PROVINCIAL TOTAL	1,872	2,362,400	1: 1,262

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1984. Excludes inactive, honorary, and retired members.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 1B NUMBER OF PHARMACISTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1984

Community by Size	Number Registered[1]	Population[2]	Pharmacist-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	464	619,814	1: 1,336
Census Metropolitan Area of Edmonton	722	682,648	1: 945
Between 10,000 and 60,000			
Airdrie	5	10,431	1: 2,086
Camrose	18	12,751	1: 708
Fort McMurray	19	35,352	1: 1,861
Grande Prairie	24	24,411	1: 1,017
Leduc	17	12,471	1: 734
Lethbridge	55	58,586	1: 1,065
Medicine Hat	36	41,493	1: 1,153
Red Deer	52	51,070	1: 982
Spruce Grove	12	11,569	1: 964
Wetaskiwin	17	10,022	1: 590
Between 5,000 and 10,000			
Brooks	11	9,421	1: 856
Drumheller	12	6,671	1: 556
Edson	5	7,110	1: 1,422
High River	6	5,114	1: 852
Hinton	7	8,904	1: 1,272
Innisfail	10	5,435	1: 544
Lacombe	8	5,954	1: 744
Lloydminster	7	9,226	1: 1,318
Peace River	10	6,043	1: 604
Ponoka	11	5,221	1: 475
Rocky Mountain House	4	5,126	1: 1,282
Stettler	7	5,136	1: 734
Stony Plain	7	5,291	1: 756
Taber	8	6,384	1: 798
Vegreville	8	5,251	1: 656
Whitecourt	4	5,408	1: 1,352
Under 5,000	306	690,088	1: 2,255
TOTAL	1,872	2,362,400	1: 1,262

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[1] Source: Alberta Pharmaceutical Association. Number of pharmacists registered with A.P.A. and residing in Alberta as of December 31, 1984. Excludes inactive, honorary, and retired members.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHARMACISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number Registered[1]	1,765	1,816	1,872
% Change in Number Registered	3.9%	2.9%	3.1%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 1,316	1: 1,298	1: 1,262
- Western Canada[4]	1: 1,320	-	-
- Canada[5]	1: 1,686	1: 1,631	-

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[1] Source: Alberta Pharmaceutical Association. Number of Pharmacists registered with the A.P.A. and residing in Alberta as of December 31, 1982, 1983, and 1984. Excludes inactive, honorary, and retired members.

[2] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Sources: (i) Rollcall Update 82. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1983. (ii) Manitoba Health Manpower Report, Manitoba, 1982. Winnipeg, Manitoba: Manitoba Department of Health, 1982. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to pharmacists registered with their respective provincial professional associations.

[5] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Alberta offers a four-year program in pharmacy leading to a Bachelor of Science degree in pharmacy. There were 75 graduates from the program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAM FOR PHARMACISTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	85	87	100
2nd Year[2]	102	76	96
3rd Year	107	88	64
4th Year	96	104	85
Graduates:	94	97	75

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The Division of Continuing Pharmacy Education of the Faculty of Pharmacy and Pharmaceutical Sciences at the University of Alberta annually publishes a booklet, Prospectives, which outlines continuing education programs that are currently available to pharmacists in the province. These programs are sponsored by the Faculty of Pharmacy and Pharmaceutical Sciences and the Alberta Pharmaceutical Association. The programs include interprofessional forums, workshops, seminars, Sunday sessions (which are offered throughout the province), and correspondence courses. Regular lectures and courses offered by the Faculty of Pharmacy and Pharmaceutical Sciences are also made available to pharmacists who wish to continue their education. Other organizations also sponsored various seminars, workshops, and lecture series on specific areas of interest in 1984.

PHARMACY ASSISTANTS

I. OVERVIEW

Definition: Assist pharmacist in hospital, industrial or retail pharmacy. Compound and mix ointments, solutions, lotions or other medications, according to specific instructions, under supervision of pharmacist. Pre-package drugs. Label drugs, chemical or other pharmaceutical preparations. Assist with keeping records of narcotics issued and returned. Count drugs issued, keeps inventory and prepare orders for suppliers, as approved by the pharmacist. Unpack and store supplies and verify items received against invoices. Wash and sterilize bottles, beakers and other glassware and utensils. Clean pharmacy work area. Answer inquiries at wicket and deliver drug items, if required. Compute charges for narcotics and pharmaceuticals dispensed from pharmacy, if required.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since there is no professional association for pharmacy assistants, the survey of employers conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 120 pharmacy assistants practicing in Alberta in 1984.[1] About 70 percent of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial pharmacy assistant-to-population ratio was 1:19,687 in 1984. It should be noted, however, that the March 31, 1984 survey of employers was not comprehensive and not all pharmacy assistants in the province were counted. Only those pharamcy assistants who worked in institutional pharmacies were enumerated in 1984. The most recent comprehensive manpower survey was conducted on

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[1] Source: "March 31, 1984 Survey of Health and Social Service Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

September 30, 1983. According to this survey there were 332 pharmacy assistants practicing in Alberta as of September 20, 1983.[2]

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Professional Association:**

None.

b) **Licensing, Registration, or Certification Authority:**

None.

c) **Legislation:**

There is no legislation regulating pharmacy assistants in Alberta at present.

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[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PHARMACY ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	5	58,100	1: 11,620
2 (Lethbridge)	3	117,900	1: 39,300
3 (Pincher Creek)	1	38,300	1: 38,300
4 (Hanna)	0	12,700	-
5 (Drumheller)	0	40,900	-
6 (Calgary)[3]	1	77,486	1: 77,486
7 (Stettler)	0	42,500	-
8 (Red Deer)	16	134,300	1: 8,394
9 (Banff)	1	23,600	1: 23,600
10 (Camrose)	4	82,100	1: 20,525
11 (Edmonton)[4]	0	118,752	-
12 (Fort McMurray)	0	92,100	-
13 (Whitecourt)	0	56,400	-
14 (Hinton)	0	27,000	-
15 (Grande Prairie)	5	137,800	1: 27,560
Census Metropolitan Area of Calgary	36	619,814[5]	1: 17,217
Census Metropolitan Area of Edmonton	48	682,648[5]	1: 14,222
PROVINCIAL TOTAL	120	2,362,400	1: 19,687

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHARMACY ASSISTANTS IN ALBERTA, 1982, 1983 AND 1984

	1982	1983	1894
Number of Practicing Personnel	270[1]	332[2]	120[3]
% Change in Number of Practicing Personnel	-2.2%	23.0%	N/A
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios: - Alberta	1: 8,603	1: 7,098	1: 19,687

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: The discrepancy between the 1983 and 1984 figures is mainly due to the fact that community pharmacies were not surveyed in 1984. Therefore, not all practicing pharmacy assistants in the province were counted in 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The majority of pharmacy assistants in Alberta were trained on the job. However, in 1976 a one-year program leading to a pharmacy technician certificate was established at Red Deer College. There were 33 graduates from the program in 1983-84.

TABLE 2 BASIC EDUCATION PROGRAM FOR PHARMACY ASSISTANTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
Red Deer Community College (Program Length: 1 year)			
Enrolments:	27	31	36
Graduates:	24	24	33

[1] Source: Alberta Health and Social Services Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

There were no continuing education programs for pharmacy assistants in Alberta in 1984.

PHYSICIANS

I. OVERVIEW

Definition: The work of physicians is concerned with preventing, diagnosing and treating human illnesses. Activities include: conducting medical examinations, making diagnoses, prescribing and giving treatment for diseases, disorders and injuries of the human body and applying preventive medicine as well as rehabilitative techniques; performing surgical operations in the treatment of injuries, diseases and disorders of the human body and engaging in clinical research within the field of activities and scope of competence.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 3,701 physicians who were residing in Alberta and registered with the College of Physicians and Surgeons of Alberta in 1984.[1] Of these physicians, 59 percent were general practitioners and 41 percent were specialists. The number of physicians by specialty is shown in a table appended to this chapter.

About 75 percent of the physicians were located in the Census Metropolitan Areas of Calgary and Edmonton. Approximately 11 percent were located in communities with a population of between 10,000 and 60,000. About 4 percent were located in communities with a population of between 5,000 and 10,000; and 11 percent were located in communities with less than 5,000 population. The number of physicians registered in Alberta grew by 11.6 percent between 1982 and 1984, while the provincial population increased by 1.7 percent during the same period. The physician-to-population ratio was 1:638 in 1984.

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians fully registered with the College of Physicians and Surgeons and residing in Alberta as of December 31, 1984. Excludes out-of-province, retired, and non-practicing life members, and members on the courtesy or education registries.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Medical Association
#304, 9901 - 108 Street
Edmonton, Alberta
T5K 1G8

Executive Director: Dr. R. Clark

b) Licensing, Registration, or Certification Authority:

College of Physicians and Surgeons of Alberta
9901 - 108 Street
Edmonton, Alberta
T5K 1G8

Registrar: Dr. L. H. LeRiche

c) Legislation:

Under the authority of the Medical Profession Act, all individuals who wish to practice as physicians or osteopaths must register with the College of Physicians and Surgeons of Alberta. Annual re-registration with the College is required of all physicians in order to continue to practice in Alberta.

The College of Physicians and Surgeons of Alberta is responsible for regulating the conduct of physicians and osteopaths and disciplining them if necessary. The Medical Profession Act sets the basic educational qualifications required for registration with the College. However, the College sets the post-basic educational qualifications required for registration as a medical specialist. The College also prescribes the educational qualifications and conditions of practice of physicians registered on its special registries.

III. PERSONNEL DATA

TABLE 1A NUMBER OF PHYSICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	65	58,100	1: 894
2 (Lethbridge)	144	117,900	1: 819
3 (Pincher Creek)	28	38,300	1: 1,368
4 (Hanna)	11	12,700	1: 1,155
5 (Drumheller)	30	40,900	1: 1,363
6 (Calgary)[3]	48	77,486	1: 1,614
7 (Stettler)	41	42,500	1: 1,037
8 (Red Deer)	162	134,300	1: 829
9 (Banff)	39	23,600	1: 605
10 (Camrose)	71	82,100	1: 1,156
11 (Edmonton)[4]	77	118,752	1: 1,542
12 (Fort McMurray)	74	92,100	1: 1,245
13 (Whitecourt)	45	56,400	1: 1,253
14 (Hinton)	18	27,000	1: 1,500
15 (Grande Prairie)	97	137,800	1: 1,421
Census Metropolitan Area of Calgary	1,212	619,814[5]	1: 511
Census Metropolitan Area of Edmonton	1,539	682,648[5]	1: 444
PROVINCIAL TOTAL	3,701	2,362,400	1: 638

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta as of December 31, 1984. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 1B NUMBER OF PHYSICIANS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1984

Community By Size	Number Registered[1]	Population[2]	Physician-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	1,212	619,814	1: 511
Census Metropolitan Area of Edmonton	1,539	682,648	1: 444
Between 10,000 and 60,000			
Airdrie	3	10,431	1: 3,477
Camrose	20	12,751	1: 638
Fort McMurray	34	35,352	1: 1,040
Grande Prairie	40	24,411	1: 610
Leduc	14	12,471	1: 891
Lethbridge	117	58,586	1: 501
Medicine Hat	53	41,493	1: 783
Red Deer	101	51,070	1: 506
Spruce Grove	12	11,569	1: 964
Wetaskiwin	11	10,022	1: 911
Between 5,000 and 10,000			
Brooks	10	9,421	1: 942
Drumheller	11	6,671	1: 606
Edson	7	7,110	1: 1,016
High River	9	5,114	1: 568
Hinton	8	8,904	1: 1,113
Innisfail	8	5,435	1: 679
Lacombe	9	5,954	1: 662
Lloydminster	12	9,226	1: 769
Peace River	9	6,043	1: 671
Ponoka	15	5,221	1: 348
Rocky Mountain House	9	5,126	1: 570
Stettler	8	5,136	1: 642
Stony Plain	9	5,291	1: 588
Taber	6	6,384	1: 1,064
Vegreville	7	5,251	1: 750
Whitecourt	4	5,408	1: 1,352
Under 5,000	404	690,088	1: 1,708
TOTAL	3,701	2,362,400	1: 638

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta as of December 31, 1984. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHYSICIANS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered Personnel[1]	3,317	3,315	3,701
% Change in Number of Registered Personnel	7.7%	0.0%	11.6%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 700	1: 711	1: 638
- Western Canada[4]	1: 573	1: 571	1: 554
- Canada[5]	1: 523	1: 512	-

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

[2] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Source: The 1982 information is based on: (i) Rollcall Update 82. Vancouver, British Columbia; Division of Health Services Research and Development, University of British Columbia, March 1983. (ii) Health Manpower Provincial Report, Manitoba, 1982. Winnipeg, Manitoba: Manitoba Department of Health, 1982. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to physicians registered with their respective provincial professional associations. The 1983 and 1984 information is based on: (i) Rollcall Update 84. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Surveys of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to physicians registered with their respective provincial professional associations.

[5] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Alberta has two medical schools which are located at the University of Alberta and the University of Calgary. The program at the University of Alberta is four years in length, based on a nine-month academic year; the University of Calgary program is three years in length, based on a 12-month academic year. The basic entry requirement to both programs is the successful completion of a two-year pre-medicine program. There were 182 graduates from the two medical schools in 1983-84.

With respect to post-graduate medical training, the Department of Hospitals and Medical Care establishes the number of funded intern/residency positions with the co-operation of the two medical schools. The medical schools, in co-operation with teaching hospitals in Calgary and Edmonton, then apportion the total funded positions among the various medical specialties. During academic year 1984-85, 681 full-time-equivalent intern/residency positions in Alberta teaching hospitals were funded by the Department of Hospitals and Medical Care.

Alberta has a two-year pre-licensure requirement. Post-graduate medical students pursuing a specialty certification must write and pass the certifying examinations of the Royal College of Physicians and Surgeons of Canada and complete an approved residency training period in an accredited teaching hospital.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PHYSICIANS IN ALBERTA[1]

	1981-82	1982-83	1983-84
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	118	120	119
2nd Year	117	116	115
3rd Year	117	117	114
4th Year	122	118	115
Graduates:	121	118	115
University of Calgary (Program Length: 3 years)			
Enrolments:			
1st Year	72	75	74
2nd Year	73	71	72
3rd Year	72	70	71
Graduates:	72	68	67
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	193	186	182

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The Faculties of Medicine at the University of Alberta and the University of Calgary offered continuing medical education programs for physicians in Alberta in 1984. In addition, the Alberta Medical Association offered some continuing education programs for its members.

PHYSICIANS BY SPECIALTY AND PHYSICIAN-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1984[1]

Specialty	Number of Physicians	Physician-to-Population Ratio
Anaesthesia	141	1: 16,754
Anatomical Pathology	29	1: 81,462
Cardiology	25	1: 94,496
Cardiovascular & Thoracic Surgery	16	1: 147,650
Clinical Immunology	1	1:2,362,400
Community Medicine	11	1: 214,763
Dermatology	21	1: 112,495
Diagnostic Radiology	137	1: 17,244
Emergency Medicine	10	1: 236,240
Gastroenterology	16	1: 147,650
General Pathology	62	1: 38,103
General Surgery	155	1: 15,241
Geriatric Medicine	2	1:1,181,200
Haematological Pathology	5	1: 472,480
Haematology	7	1: 337,485
Infectious Diseases	1	1:2,362,400
Internal Medicine	284	1: 8,318
Medical Biochemistry	5	1: 472,480
Medical Microbiology	5	1: 472,480
Neurology	34	1: 69,482
Neuropathology	5	1: 472,480
Neurosurgery	15	1: 157,493
Nuclear Medicine	7	1: 337,485
Obstetrics & Gynaecology	117	1: 20,191
Ophthalmology	60	1: 39,373
Orthopaedic Surgery	70	1: 33,749
Otolaryngology	32	1: 73,825
Pediatrics	139	1: 16,996
Pediatric Cardiology	1	1:2,362,400
Pediatrics General Surgery	4	1: 590,600
Physical Medicine & Rehabilitation	11	1: 214,764
Plastic Surgery	27	1: 87,496
Psychiatry	137	1: 17,244
Radiation Oncology	22	1: 107,382
Respiratory Medicine	11	1: 214,764
Rheumatology	11	1: 214,764
Thoracic Surgery	1	1:2,362,400
Urology	35	1: 67,497
Vascular Surgery	2	1:1,181,200
Specialty Total	1,502	1: 1,573
General Practice	2,199	1: 1,074
GRAND TOTAL	3,701	1: 638

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[1] Source: College of Physicians and Surgeons of Alberta. Number of physicians who were fully registered with the College of Physicians and Surgeons of Alberta and residing in Alberta. Excludes out-of-province, retired, non-practicing life members, and members on the courtesy or education registries.

PHYSIOTHERAPISTS

I. OVERVIEW

Definition: Plan and carry out programs of physical treatment, in consultation with physicians and other health care workers, to rehabilitate injured or disabled patients. Administer muscle, nerve, joint and functional ability tests to identify physical problems of patient. Assess patient's symptoms and capabilities. Direct and aid patients individually or in groups, in activities designed to assist in muscle restoration and joint mobility. Guide patient in remedial activities involving use of parallel bars, weights, traction and other equipment. Gives whirlpool and contrast baths and applies moist packs. Administer treatments, using diathermy, ultrasonic and microwave machines, infrared and ultra-violet lamps, low-voltage generators and other electrotherapeutic equipment. Instructs patients and their families in procedures to be continued at home. Record treatments given and patient's response and progress.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Association of Chartered Physiotherapists of Alberta (A.C.P.A.) is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 598 physiotherapists practicing in Alberta in 1984.[1] About 74 percent of the practising physiotherapists were employed in the Census Metropolitan Areas of Calgary and Edmonton, the provincial physiotherapist-to-population ratio was 1: 3,951 in 1984. It should be noted, however, that the March 31, 1984 survey was not comprehensive and not all physiotherapists in the province were counted. The most recent comprehensive manpower survey was conducted on September 30, 1983. According to this survey, there were 669 physiotherapists practicing in Alberta as of September 30, 1983.[2]

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[1] Source: "March, 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Physiotherapy Association
P.O. Box 4627, Station C
Calgary, Alberta
T2T 5P1

President: Ms. Alix Jackson

b) Licensing, Registration, or Certification Authority:

Association of Chartered Physiotherapists of Alberta
2nd Floor, 10444 - 82 Avenue
Edmonton, Alberta
T6E 2A2

Chairman: Ms. Marion Briggs

c) Legislation:

The Physical Therapy Profession Act was passed but was not proclaimed in 1984. With respect to professional regulation, the Chartered Physiotherapists Act was still in effect in 1984. This Act does not require mandatory registration of all physiotherapists practicing in the province, but all individuals who wish to use the title of "Chartered Physiotherapist" must register with the Association of Chartered Physiotherapists of Alberta. Annual re-registration with the Association is required of all physiotherapists who wish to continue to use the title of "Chartered Physiotherapist."

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[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

The A.C.P.A. is responsible for regulating the conduct of its members and for maintaining professional discipline. The Council of the Association of Chartered Physiotherapists of Alberta sets the educational qualifications required for registration with the A.C.P.A. All members of the Canadian Physiotherapists Association and graduates of physiotherapy training programs from Canadian universities are eligible for membership in the A.C.P.A. Others must apply to the Universities Coordinating Council for examination of qualifications for membership in the Association.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PHYSIOTHERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	13	58,100	1: 4,469
2 (Lethbridge)	27	117,900	1: 4,367
3 (Pincher Creek)	3	38,300	1: 12,767
4 (Hanna)	1	12,700	1: 12,700
5 (Drumheller)	2	40,900	1: 20,450
6 (Calgary)[3]	13	77,486	1: 5,960
7 (Stettler)	6	42,500	1: 7,083
8 (Red Deer)	27	134,300	1: 4,974
9 (Banff)	5	23,600	1: 4,720
10 (Camrose)	11	82,100	1: 7,464
11 (Edmonton)[4]	10	118,752	1: 11,875
12 (Fort McMurray)	10	92,100	1: 9,210
13 (Whitecourt)	10	56,400	1: 5,640
14 (Hinton)	3	27,000	1: 9,000
15 (Grande Prairie)	13	137,800	1: 10,600
Census Metropolitan Area of Calgary	203	619,814[5]	1: 3,053
Census Metropolitan Area of Edmonton	241	682,648[5]	1: 2,833
PROVINCIAL TOTAL	598	2,362,400	1: 3,951

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PHYSIOTHERAPISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	634[1]	669[2]	598[3]
% Change in Number of Practicing Personnel	18.7%	5.5%	-10.6%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 3,664	1: 3,522	1: 3,951
- Western Canada[6]	-	1: 3,221	-
- Canada[7]	1: 4,242	1: 4,146	-

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: The discrepancy between the 1983 and 1984 figures is mainly due to the fact that the 1984 survey was not a comprehensive survey. Therefore not all physiotherapists in the province were counted in 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: (i) Rollcall 83. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Policy, Research and Management Services Branch, Saskatchewan Health, Regina, Saskatchewan. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

[7] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Prior to 1977, both a three-year diploma program and a four-year baccalaureate degree program in physical therapy were offered at the University of Alberta. Only the four-year baccalaureate degree program is now offered at the University of Alberta. There were 45 graduates from the program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PHYSIOTHERAPISTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	42	45	46
2nd Year	39	37	41
3rd Year	35	34	43
4th Year[2]	69	55	43
Graduates:	51	56	45

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

[2] Increases in the fourth year enrolments were due to graduates of the diploma program returning to complete the baccalaureate degree program. More students may graduate than are registered in the fourth year because some students may complete the required physiotherapy courses at the University of Alberta and then leave the university and complete their optional courses while working. Upon successful completion of these approved electives, the students are awarded a degree from the University of Alberta.

b) Continuing Education Programs:

The Department of Physiotherapy at the University of Alberta offers a baccalaureate program for diploma physiotherapists who wish to upgrade their educational qualifications.

In addition, those persons wishing to re-enter the profession after a prolonged period of absence may apply to the A.C.P.A for information regarding refresher courses. While completion of refresher courses prior to re-entering the work force is not mandatory, the A.C.P.A. strongly recommends that physiotherapists returning to work following a prolonged absence avail themselves of opportunities to refresh theoretical and practical knowledge.

The University of Calgary and Grant MacEwan Community College also offered a number of continuing education courses in 1984.

PODIATRISTS

I. OVERVIEW

Definition: A Podiatrist treats ailments, diseased conditions, deformities or injuries of the human foot and the leg muscles controlling the foot; examines, diagnoses and treats such ailments, conditions, deformities or injuries but does not treat systemic diseases of bones, muscles or ligaments, or does not use X-ray equipment for purposes other than diagnostic, or does not use anaesthetics other than local.

(Source: Podiatry Act, 1968, Ch. 78.)

There were 18 podiatrists who were residing in Alberta and registered with the Alberta Podiatry Association (A.P.A.) in 1984.[1]. All of the podiatrists were located in four major urban areas: the Census Metropolitan Areas of Calgary and Edmonton, Lethbridge, and Medicine Hat. The provincial podiatrist-to-population ratio was 1:131,244 in 1984.

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[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Podiatry Association
c/o Dr. R.J. Gorman
11528 Jasper Avenue
Edmonton, Alberta
T5K 0M8

President: Dr. R.J. Gorman

b) Licensing, Registration, or Certification Authority:

Board of Examiners for Podiatry
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

and

Alberta Podiatry Association
c/o Dr. R.J. Gorman
11528 Jasper Avenue
Edmonton, Alberta
T5K 0M8

c) Legislation:

Under the authority of the Podiatry Act, all individuals who wish to practice as podiatrists in the province must apply to the Board of Examiners for Podiatry, a provincial government certification body. If an individual is eligible, the Board issues a certificate of approval for registration. All successful applicants must register with the A.P.A. and annual re-registration with the Association is required of all podiatrists in order to continue to practice in Alberta.

The A.P.A. is responsible for regulating the conduct and discipline of its members. The Board of Examiners for Podiatry sets the educational qualifications required for registration with the A.P.A.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PODIATRISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	1	58,100	1: 58,100
2 (Lethbridge)	1	117,900	1:117,900
Other Census Divisions[3]	0	883,938	-
Census Metropolitan Area of Calgary	10	619,814[4]	1: 61,981
Census Metropolitan Area of Edmonton	6	682,648[4]	1:113,775
PROVINCIAL TOTAL	18	2,362,400	1:131,244

[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Areas of Calgary and Edmonton.

[4] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PODIATRISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered Personnel[1]	16	18	18
% Change in Number of Registered Personnel	23.1%	12.5%	0.0%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1:145,168	1:130,917	1:131,244
- Canada[4]	1: 84,877	1: 90,142	-

---

[1] Source: Alberta Podiatry Association. Number of podiatrists registered with the A.P.A. and residing in Alberta as of December 31, 1982, 1983 and 1984.

[2] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no training programs for podiatrists in Canada. The United States has five schools of podiatry which offer four-year training programs in podiatry following two years of university preparation. Most of Alberta's podiatrists were trained in the United States.

b) Continuing Education Programs:

There were various seminars, workshops, clinics, lectures, and conventions held throughout Canada and the United States, which the province's podiatrists are encouraged to attend, as part of their continuing education.

PROSTHETISTS AND ORTHOTISTS

I. OVERVIEW

Definition: Design, build, fit and repair prosthetic and orthotic appliances to correct physical defects of human body. Interpret physician's specifications for prosthesis (artificial limb) or orthosis (support or brace). Measure patient for appliance. Design or draw working sketch or model of prosthesis or orthosis required. Build or direct other workers to build prosthetic or orthotic appliance, using materials, such as plastic, wood, leather, steel, aluminium and padding and machine- and hand-tools. Fit patient with appliance and add or remove padding, adjust parts and change tension to achieve maximum comfort and optimum function. Revise working sketch to reflect changes and direct other workers to modify appliance. Advise patient in application, use and care of appliance. Service and repair appliance as necessary.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Prosthetists and Orthotists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There has been a substantial increase in the number of prosthetists and orthotists in Alberta between 1982 and 1984, with the number of personnel almost doubling. There were 45 prosthetists and orthotists practicing in Alberta in 1984.[1] All of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial prosthetist/orthotist-to-population ratio was 1:52,498 in 1984.

---

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) **Professional Association:**

Alberta Association of Prosthetists and Orthotists
c/o Prosthetic and Orthotic Department
Calgary General Hospital
841 Centre Avenue East
Calgary, Alberta
T2E 0A1

President: Mr. Alex Calder

b) **Licensing, Registration, or Certification Authority:**

None.

c) **Legislation:**

There is no legislation regulating prosthetists and orthotists in Alberta at present.

PROSTHETISTS AND ORTHOTISTS

I. OVERVIEW

Definition: Design, build, fit and repair prosthetic and orthotic appliances to correct physical defects of human body. Interpret physician's specifications for prosthesis (artificial limb) or orthosis (support or brace). Measure patient for appliance. Design or draw working sketch or model of prosthesis or orthosis required. Build or direct other workers to build prosthetic or orthotic appliance, using materials, such as plastic, wood, leather, steel, aluminium and padding and machine- and hand-tools. Fit patient with appliance and add or remove padding, adjust parts and change tension to achieve maximum comfort and optimum function. Revise working sketch to reflect changes and direct other workers to modify appliance. Advise patient in application, use and care of appliance. Service and repair appliance as necessary.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Prosthetists and Orthotists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There has been a substantial increase in the number of prosthetists and orthotists in Alberta between 1982 and 1984, with the number of personnel almost doubling. There were 45 prosthetists and orthotists practicing in Alberta in 1984.[1] All of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial prosthetist/orthotist-to-population ratio was 1:52,498 in 1984.

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Prosthetists and Orthotists
c/o Prosthetic and Orthotic Department
Calgary General Hospital
841 Centre Avenue East
Calgary, Alberta
T2E 0A1

President: Mr. Alex Calder

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

There is no legislation regulating prosthetists and orthotists in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PROSTHETISTS AND ORTHOTISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS METROPOLITAN AREA, ALBERTA, 1984

Census Metropolitan Area	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Census Metropolitan Area of Calgary	16	619,814[3]	1: 38,738
Census Metropolitan Area of Edmonton	29	682,648[3]	1: 23,540
Areas Other Than CMA Calgary and CMA Edmonton	0	1,059,938	-
PROVINCIAL TOTAL	45	2,362,400	1: 52,498

[1] Source: "March 31, 1984 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PROSTHETISTS AND ORTHOTISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	23[1]	25[2]	45[3]
% Change in Number of Practicing Personnel	21.0%	8.7%	80.0%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratio: - Alberta	1:100,987	1: 94,260	1: 52,498

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for prosthetists and orthotists in Alberta. Although many of the prosthetists and orthotists in the province are trained on-the-job, some have been trained in post-secondary educational institutions such as the British Columbia Institute of Technology (B.C.I.T.). Alberta signed an inter-provincial training agreement with the B.C.I.T. and the Government of British Columbia in 1981 to purchase two training places per year in 1980, 1982, and 1984 in the two-year program for prosthetists and orthotists at the B.C.I.T.

b) Continuing Education Programs:

No continuing education programs for prosthetists and orthotists were offered in 1984.

PSYCHIATRIC NURSES

I. OVERVIEW

Definition: Provide nursing care to patients with mental and emotional problems in hospitals and clinics or in private homes. Administer prescribed medications and treatments and attend to total nursing care of assigned patients. Observe, record and report symptoms and changes in patient's condition. Confer with psychiatrists, psychologists, social workers, occupational therapists and other specialists to evaluate patient's condition and to plan therapy. Encourage patients to participate in routine work functions and recreational, community and other activities to build up self-confidence and to develop relationships with others. Counsel patients at home or in clinic and evaluate patient's adjustment in community.

(Source: Canadian Classifications and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Psychiatric Nurses Association of Alberta (P.N.A.A.) is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 612 psychiatric nurses practicing in Alberta in 1984.[1] This figure is considerably smaller than that for 1983. The drop in the number of psychiatric nurses is largely due to the fact that when completing the 1984 survey, one major institution reported psychiatric nurses as registered nurses - psychiatric. Whereas the 1983 manpower survey shows that there were 701 psychiatric nurses and 520 registered nurses - psychiatric, the 1984 manpower survey shows that there were 612 psychiatric nurses and 609 registered nurses - psychiatric.

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

About 71 percent of the practicing psychiatric nurses were employed in the Census Metropolitan Area of Edmonton and in the Town of Ponoka in Census Division 8, the locations of Alberta's two major psychiatric institutions. The provincial psychiatric nurse-to-population ratio was 1: 3,860 in 1984. Some of the services provided by psychiatric nurses are also provided by registered nurses (see chapter on Registered Nurses).

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Psychiatric Nurses Association of Alberta
P. O. Box 755
Ponoka, Alberta
T0C 2H0

Executive Director: Mr. E.S. Neufeldt

b) Licensing, Registration, or Certification Authority:

Advisory Committee to the Psychiatric
Nursing Training Act
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

c) Legislation:

The Psychiatric Nursing Training Act restricts the practice of psychiatric nursing to persons certified by the Advisory Committee to the Psychiatric Nursing Training Act and to registered or graduate nurses.[1]

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[1] According to the Psychiatric Nurses Association Act, family members of a mentally ill person, people employed as domestics who do not hold themselves out to be psychiatric nurses, and registered nursing assistants are also exempted under the Act.

Registration with the Psychiatric Nurses Association of Alberta is voluntary. To maintain active membership, an individual must have practiced psychiatric nursing at least one full year in the preceeding five years.

The P.N.A.A. is responsible for regulating the conduct and discipline of its members. The Advisory Committee can cancel the certification of a psychiatric nurse if warranted. The Committee is also responsible for setting the educational qualifications required for certification as a psychiatric nurse. Individuals who have taken required courses of study or equivalent training outside Alberta are eligible for certification.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PSYCHIATRIC NURSES AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	58,100	1: 14,525
2 (Lethbridge)	18	117,900	1: 6,550
3 (Pincher Creek)	15	38,300	1: 2,553
4 (Hanna)	1	12,700	1: 12,700
5 (Drumheller)	0	40,900	-
6 (Calgary)[3]	4	77,486	1: 19,372
7 (Stettler)	1	42,500	1: 42,500
8 (Red Deer)	87	134,300	1: 1,544
9 (Banff)	0	23,600	-
10 (Camrose)	16	82,100	1: 5,131
11 (Edmonton)[4]	4	118,752	1: 29,688
12 (Fort McMurray)	4	92,100	1: 23,025
13 (Whitecourt)	1	56,400	1: 56,400
14 (Hinton)	1	27,000	1: 27,000
15 (Grande Prairie)	6	137,800	1: 22,967
Census Metropolitan Area of Calgary	102	619,814[5]	1: 6,077
Census Metropolitan Area of Edmonton	348	682,648[5]	1: 1,962
PROVINCIAL TOTAL	612	2,362,400	1: 3,860

---

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR PSYCHIATRIC NURSES IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	688[1]	701[2]	612[3]
% Change in Number of Practicing Personnel	0.0%	1.9%	N/A
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 3,376	1: 3,362	1: 3,860
- Western Canada[6]	-	1: 1,356	-

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984. Note: Because one of the major employers reported psychiatric nurses as registered nurses - psychiatric, there exists a major discrepancy between the 1983 and 1984 figures.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: (i) Rollcall 83. Vancouver, British Columbia: Divisions of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Basic education programs for psychiatric nurses in Alberta are offered by two institutions: Alberta Hospital - Edmonton and Alberta Hospital - Ponoka. Both hospital-based programs are two years in length. Before they are eligible for certification, students must pass the provincial examinations which are administered by Dr. V. Nyberg, Department of Educational Psychology, the University of Alberta. There were 57 graduates from the two programs in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAMS FOR PSYCHIATRIC NURSES IN ALBERTA[1]

	1981-82	1982-83	1983-84
Alberta Hospital - Edmonton (Program Length: 2 years)			
Enrolments:			
1st Year	39	43	48
2nd Year	37	23	33
Graduates:	33	21	22
Alberta Hospital - Ponoka (Program Length: 2 years)			
Enrolments[2]:			
1st Year	37	30	34
2nd Year	22	35	35
Graduates:	22	28	35
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	55	49	57

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

[2] Additional students were accepted into the second year in 1983-84.

b) Continuing Education Programs:

The two hospital-based schools of psychiatric nursing did not offer continuing education programs for psychiatric nurses in 1984. The Psychiatric Nurses Association of Alberta approved an eight-week refresher program in psychiatric nursing.

PSYCHOLOGISTS

I. OVERVIEW

Definition: A psychologist collects, interprets and applies scientific data for the purpose of investigating psychological phenomena and formulating and applying psychological principles and laws in predicting and controlling behaviour in society.

Studies human behaviour and mental processes and investigates and recommends or provides treatment of psychological problems. Plans and carries out experiments using human beings and animal subjects, observes behaviour, and measures mental and physical characteristics. Analyzes effects of hereditary, and environmental factors on individual thought and behaviour. Undertakes diagnosis, treatment and prevention of personality disorders and problems of maladjustment to social and occupational environment.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

As of December 31, 1984, there were 1,298 members of the Psychologists Association of Alberta (P.A.A.).[1] Because the Association did not publish a membership directory, it is not known how many of the P.A.A. members were certified psychologists, and it is not possible to identify where psychologists were located in the province.

Psychology was among the occupations surveyed by the Alberta Health and Social Services Disciplines Committee in 1984.[2] But because the March 31, 1984 survey of health and social service personnel working in Alberta did not survey psychologists in independent practice, only a small number of psychologists were enumerated. The survey counted only 330 certified psychologists, the majority of whom were employed in heath and social service institutions and agencies, such as hospitals and government departments.

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[1] Source: Psychologists Association of Alberta.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

Because available data are inadequate, the table in Section III, "Number of Personnel and Personnel-to-Population Ratios by Census Division", is not produced. Readers who wish to have an idea about the geographic distribution of certified psychologists in Alberta should consult the chapter on psychologists in Health and Social Service Manpower in Alberta, 1983.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Psychologists Association of Alberta
5-157 Education Building II
The University of Alberta
Edmonton, Alberta
T6G 2E1

President: Dr. J.A. Browne

b) Licensing, Registration, or Certification Authority:

Psychologists Association of Alberta
5-157 Education Building II
The University of Alberta
Edmonton, Alberta
T6G 2E1

c) Legislation:

Under the authority of The Psychologists Act, all individuals who wish to practice as certified psychologists or psychologists must register with the Psychologists Association of Alberta (P.A.A.). Annual re-registration with the P.A.A. is required of all certified psychologists in order to continue to practice in Alberta. However, actual membership in the P.A.A. is voluntary.

The P.A.A. is responsible for the conduct and discipline of members and certified psychologists. In addition, the

Association sets the basic educational qualifications required for membership. Assessment and approval of academic qualifications for registration as a certified psychologist are performed by the Office of Professional Examinations, the Universities Coordinating Council.

III. PERSONNEL DATA

TABLE 1 SELECTED MANPOWER STATISTICS FOR PSYCHOLOGISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered Personnel	1,029[1]	1,170[1]	1,298[2]
% Change in Number of Registered Personnel	24.1%	13.7%	N/A
Population (Alberta)	2,322,690[3]	2,356,500[3]	2,362,400[4]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 2,257	1: 2,014	-
- Canada[5]	1: 3,929	1: 3,620	-

[1] Source: Psychologists Association of Alberta. Number of certified psychologists registered with the P.A.A. and residing in Alberta as of December 31, 1982 and 1983. Excludes associate members and student affiliates.

[2] Source: Psychologists Association of Alberta. Note: Since a membership directory was not published in 1984, it was not possible to distinguish between certified and non-certified (e.g., student and associate) members. The number includes both certified and non-certified psychologists.

[3] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[4] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[5] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Alberta has six masters degree programs in psychology: the Masters of Science program at the University of Calgary, the Masters of Arts and Masters of Science programs at the University of Alberta, the Masters of Education program in Educational Psychology at the University of Alberta and the University of Calgary, and the Masters of Science program in Educational Psychology at the University of Calgary. There were 82 graduates from these six programs in 1983-84.

In addition, the University of Alberta and the University of Calgary have doctoral programs in both psychology and educational psychology. There were 27 graduates from these four programs in 1983-84.

TABLE 2 BASIC EDUCATION PROGRAMS FOR PSYCHOLOGISTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
A. MASTERS PROGRAMS			
University of Alberta Master of Arts in Psychology (Program Length: variable)			
Enrolments:			
1st Year	1	1	5
2nd Year	2	-	1
3rd Year[2]	3	4	-
Graduates:	-	2	4
University of Alberta Masters of Science in Psychology (Program Length: variable)			
Enrolments:			
1st Year	3	3	2
2nd Year	3	3	3
3rd Year[2]	6	7	2
Graduates:	5	3	3

TABLE 3 (cont'd)

	1981-82	1982-83	1983-84
University of Alberta Master of Education in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	70	59	68
2nd Year[3]	111	129	105
Graduates:	19	31	44
University of Calgary Master of Science in Psychology (Program Length: variable)			
Enrolments:			
1st Year	8	9	13
2nd Year	7	7	9
3rd Year[2]	5	10	11
Graduates:	3	3	4
University of Calgary Master of Education in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	25	34	32
2nd Year[3]	37	33	37
Graduates:	18	7	11
University of Calgary Master of Science in Educational Psychology (Program Length: variable)			
Enrolments:			
1st Year	29	33	20
2nd Year[3]	38	27	43
Graduates:	16	18	16
PROVINCIAL TOTAL:			
Number of Masters Programs: 6			
Graduates:	61	64	82

TABLE 3 (cont'd)

		1981-82	1982-83	1983-84
B.	DOCTORAL PROGRAMS			
	University of Alberta			
	Ph.D. In Psychology			
	(Program Length: variable)			
	Enrolments:			
	1st Year	3	2	8
	2nd Year	9	4	2
	3rd Year[2]	4	11	10
	Graduates:	1	6	5
	University of Alberta			
	Ph.D. in Educational Psychology			
	(Program Length: variable)			
	Enrolment:			
	1st Year	20	30	33
	2nd Year[3]	68	77	75
	Graduates:	12	16	10
	University of Calgary			
	Ph.D. in Psychology			
	(Program Length: variable)			
	Enrolments:			
	1st Year	4	-	3
	2nd Year	5	3	-
	3rd Year[2]	9	10	13
	Graduates:	1	1	3
	University of Calgary			
	Ph.D. in Educational Psychology			
	(Program Length: variable)			
	Enrolments:			
	1st Year	10	9	13
	2nd Year[3]	26	29	26
	Graduates:	6	4	9
	PROVINCIAL TOTAL			
	Number of Ph.D. Programs: 4			
	Graduates:	20	27	27

---

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

[2] Third year refers to students enrolled in third and later years of the program.

[3] Second year refers to students enrolled in second and later years of the program.

b) Continuing Education Programs:

The Psychologists Association, along with other organizations, offered various workshops and conferences of interest to psychologists.

PUBLIC HEALTH INSPECTORS

I. OVERVIEW

Definition: To effect compliance with laws and regulations governing health standards, and to achieve this end, perform any combination of the following duties: Locate persons suspected of exposure to communicable disease; interview persons exposed to communicable disease to secure information on possible contacts; advise contacts to seek medical treatment. Inspect food and seize and dispose of any food or animal injurious to health. Inspect food establishments, housing, water supplies, sewage disposal sites, waste disposal sites, recreational areas, and other public places. Take samples of food, water, and air, and order chemical, physical, biological, and bacteriological tests as appropriate, and interpret test results. Carry out procedures to ensure permits required by law are held. Initiate measures to control animal and insect vectors. Promote health through information and education programs.

(Source: Canadian Institute of Public Health Inspectors)

Since registration with the Canadian Institute of Public Health Inspectors is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 136 public health inspectors practicing in Alberta in 1984.[1] About 52 percent of the practising public health inspectors were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial public health inspector-to-population ratio was 1:17,371 in 1984.

---

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Canadian Institute of Public Health Inspectors
(Alberta Branch)
#101, 5421 - 11 Street N.E.
Calgary, Alberta
T2E 6M4

Secretary/Treasurer, Alberta Branch: Mr. Alexander Mackenzie

b) Licensing, Registration, or Certification Authority:

Board of Certification of Public Health Inspectors
Ottawa-Carleton Regional Health Unit
P.O. Box 5367, Station "S"
Ottawa, Ontario
K2C 3J1

Board Chairman: Mr. Phillip Barton, C.P.H.I.(C)

c) Legislation:

Public health inspectors in Alberta are regulated under the Public Health Act. According to a regulation under the Public Health Act, all individuals who wish to practice as public health inspectors for a local board of health established under the Public Health Act or Health Unit Act, must be certified by the Board of Certification of Public Health Inspectors which is administered by the Canadian Institute of Public Health Inspectors. This requirement does not apply to persons who became public health inspectors prior to January 1, 1961 and who have continued in such positions since that date.

III. PERSONNEL DATA

TABLE 1 NUMBER OF PUBLIC HEALTH INSPECTORS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	58,100	1:14,525
2 (Lethbridge)	7	117,900	1:16,843
3 (Pincher Creek)	3	38,300	1:12,767
4 (Hanna)	2	12,700	1: 6,350
5 (Drumheller)	2	40,900	1:20,450
6 (Calgary)[3]	3	77,486	1:25,829
7 (Stettler)	3	42,500	1:14,167
8 (Red Deer)	6	134,300	1:22,383
9 (Banff)	2	23,600	1:11,800
10 (Camrose)	5	82,100	1:16,420
11 (Edmonton)[4]	7	118,752	1:16,965
12 (Fort McMurray)	5	92,100	1:18,420
13 (Whitecourt)	4	56,400	1:14,100
14 (Hinton)	3	27,000	1: 9,000
15 (Grande Prairie)	9	137,800	1:15,311
Census Metropolitan Area of Calgary	32	619,814[5]	1:19,369
Census Metropolitan Area of Edmonton	39	682,648[5]	1:17,504
PROVINCIAL TOTAL	136	2,362,400	1:17,371

---

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2

SELECTED MANPOWER STATISTICS FOR PUBLIC HEALTH INSPECTORS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered or Practising Personnel	131[1]	135[2]	136[3]
% Change in Number of Registered or Practising Personnel	9.2%	3.1%	0.8%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	4.5%	3.8%	1.5%
Personnel-to-Population Ratios:			
- Alberta	1:17,730	1:17,456	1:17,371
- Western Canada[6]	1:15,604	-	-
- Canada[7]	1:26,254	1:30,515	-

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Sources: (i) Rollcall Update 82. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1983. (ii) Health Manpower Provincial Report, Manitoba, 1982. Winnipeg, Manitoba: Manitoba Department of Health, 1982. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of employers conducted by the Alberta Health and Social Services Disciplines Committee.

[7] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

There are no formal training programs for public health inspectors in Alberta. The British Columbia Institute of Technology in Vancouver, the Ryerson Polytechnical Institute in Toronto, and College Regional Bourghemin in St. Hyacinthe, Quebec offer two-year diploma programs in public health inspection. In addition, Ryerson Polytechnical Institute offers a four-year baccalaureate degree program in environmental health. Most of the public health inspectors working in Alberta were trained in these post-secondary educational institutions.

b) Continuing Education Programs:

There were no continuing education programs for public health inspectors in Alberta in 1984.

RADIOLOGICAL TECHNICIANS

I. OVERVIEW

Definition: Radiological Technicians (Diagnostic)

Operate radiography equipment to produce pictures of body structures for diagnostic purposes. Explain treatment and reassure patients. Prepare drugs and chemicals for radiologist. Position patient according to part of body being x-rayed. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam, to regulate length and intensity of x-ray exposure and to expose film. Process and prepare films for interpretation by radiologist. Assist radiologist in fluoroscopy, cinefluoroscopy and other diagnostic procedures. Operate radiography equipment in operating theater or other specialized area to assist physician or surgeon.

Radiological Technicians (Therapy)

Administer radiation treatment to patients as prescribed by radiation oncologist. Explain treatment and reassure patients. Position patient according to part of body being treated. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam. Observe patient through window or on closed circuit television during treatment. Notify radiation onologist if medical problems arise. Assist clinical physicist to prepare patient's treatment plan according to radiation oncologist's prescription. Process or assist in preparation of sealed radioactive substances for surface application or insertion into body cavities.

Nuclear Medicine Technicians

Prepare radioactive solutions and reagents and operates scanning equipment for diagnostic purposes. Perform assays and quality-control tests on radioactive materials. Calculate doses to be administered by physician. Position patient and calibrate scanning equipment. Operate radiation-scanning equipment to produce photographic image of irradiated area. Calculate blood volume and red-cell survival, using geiger counter, electroscope, scaler, scintillation and position scanner and scintogram. Monitor oscilloscope images and study photographic images to determine if further scanning is required. Perform radioisotope scanning of pathological specimens and blood samples.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Medical Radiation Technologists (A.A.M.R.T.) is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 840 radiological technicians practicing in Alberta in 1984.[1] Of the 840 radiological technicians, 749 were radiological technicians (diagnostic), 38 were radiological technicians (therapy), and 53 were nuclear medicine technicians. About three-quarters of all radiological technicians were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial radiological technician-to-population ratio was 1:2,812 in 1984.

Some of the basic x-ray services performed by radiological technicians are also provided by combined laboratory and x-ray technicians, especially in small rural hospitals (see chapter on Combined Laboratory and X-Ray Technicians).

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Medical Radiation Technologists
1521 - 13 Street South
Lethbridge, Alberta
T1K 1T4

President: Mrs. Donna Hateley, RTR

b) Licensing, Registration, or Certification Authority:

Alberta Health Disciplines Board.

c) Legislation:

On June 6, 1983 medical radiological technicians were designated under the Health Disciplines Act. On January 16, 1984 the Minister Responsible for Professions and Occupations established the Medical Radiation Technologists Committee. During 1984, this Committee prepared draft regulations for this discipline. These regulations are expected to be presented to the Health Disciplines Board in 1985.

III. PERSONNEL DATA

TABLE 1A NUMBER OF RADIOLOGICAL TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	13	58,100	1: 4,469
2 (Lethbridge)	41	117,900	1: 2,876
3 (Pincher Creek)	10	38,300	1: 3,830
4 (Hanna)	1	12,700	1: 12,700
5 (Drumheller)	5	40,900	1: 8,180
6 (Calgary)[3]	8	77,486	1: 9,686
7 (Stettler)	9	42,500	1: 4,722
8 (Red Deer)	42	134,300	1: 3,198
9 (Banff)	8	23,600	1: 2,950
10 (Camrose)	19	82,100	1: 4,321
11 (Edmonton)[4]	16	118,752	1: 7,422
12 (Fort McMurray)	16	92,100	1: 5,756
13 (Whitecourt)	10	56,400	1: 5,640
14 (Hinton)	3	27,000	1: 9,000
15 (Grande Prairie)	25	137,800	1: 5,512
Census Metropolitan Area of Calgary	270	619,814[5]	1: 2,296
Census Metropolitan Area of Edmonton	344	682,648[5]	1: 1,984
PROVINCIAL TOTAL	840	2,362,400	1: 2,812

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 1B NUMBER OF RADIOLOGICAL TECHNICIANS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1984

Community by Size	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	270	619,814	1: 2,296
Census Metropolitan Area of Edmonton	344	682,648	1: 1,984
Between 10,000 and 60,000			
Airdrie	0	10,431	-
Camrose	4	12,571	1: 3,143
Fort McMurray	9	35,352	1: 3,928
Grande Prairie	8	24,411	1: 3,051
Leduc	3	12,471	1: 4,157
Lethbridge	30	58,586	1: 1,953
Medicine Hat	13	41,493	1, 3,192
Red Deer	32	51,070	1: 1,596
Spruce Grove	2	11,569	1: 5,785
Wetaskiwin	4	10,022	1: 2,506
Between 5,000 and 10,000			
Brooks	6	9,421	1: 1,570
Drumheller	2	6,671	1: 3,336
Edson	1	7,110	1: 7,110
High River	5	5,114	1: 1,023
Hinton	2	8,904	1: 4,452
Innisfail	1	5,435	1: 5,435
Lacombe	2	5,954	1: 2,977
Lloydminster	4	9,226	1: 2,307
Peace River	3	6,043	1: 2,014
Ponoka	3	5,221	1: 1,740
Rocky Mountain House	2	5,126	1: 2,563
Stettler	3	5,136	1: 1,712
Stony Plain	7	5,291	1: 756
Taber	5	6,384	1: 1,277
Vegreville	2	5,251	1: 2,626
Whitecourt	5	5,408	1: 1,082
Under 5,000	68	690,088	1: 10,148
TOTAL	840	2,362,400	1: 2,812

[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RADIOLOGICAL TECHNICIANS IN ALBERTA 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	734[1]	871[2]	840[3]
% Change in Number Practicing Personnel	7.2%	18.7%	-3.6%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 3,164	1: 2,706	1: 2,812
- Canada[6]	1: 2,649	1: 2,613	-

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[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

A person who wishes to become a radiological technician can obtain training in one of three areas: radiography, radiotherapy, and nuclear medicine. Seven training hospitals in Calgary, Edmonton, and Red Deer, in conjunction with the Northern Alberta Institute of Technology, offer a two-year medical x-ray technology diploma program in radiography. There were 50 graduates from the program in 1983-84.

Both the Cross Cancer Institute in Edmonton and the Calgary Cancer Clinic offer training programs in therapeutic radiology which are 27 months in length. There were five graduates from the two programs in 1983-84.

Provincial training programs in nuclear medicine are offered by the University of Alberta Hospitals in Edmonton and Foothills Hospital in Calgary in conjunction with the Southern Alberta Institute of Technology. The program is two years in length. There were nine graduates in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAMS FOR RADIOLOGICAL TECHNICIANS IN ALBERTA[1]

	1981-82	1982-83	1983-84
A. PROGRAM IN RADIOGRAPHY			
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	59	59	59
2nd Year	41	56	56
Graduates:	39	55	50

TABLE 3 (cont'd)

	1981-82	1982-83	1983-84
B. PROGRAMS IN THERAPEUTIC RADIOLOGY			
Cross Cancer Institute (Program Length: 27 months)			
Enrolments:			
1st Year	5	3	6
2nd Year	4	4	3
Graduates:	3	3	3
Tom Baker Cancer Centre (Program Length: 27 months)			
Enrolments:			
1st Year	3	4	4
2nd Year	0	2	2
Graduates:	0	2	2
PROVINCIAL TOTAL			
Number of Programs in Radiotherapy: 2			
Graduates:	3	5	5
C. PROGRAM IN NUCLEAR MEDICINE			
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	14	16	16
2nd Year	8	10	9
Graduates:	8	8	9

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The A.A.M.R.T. offered continuing education seminars quarterly which were either weekend seminars or week-long sessions. The Association also provided continuing education courses in conjunction with its annual conference.

In addition, the Canadian Association of Medical Radiation Technologists offered a series of week-long continuing education lectures in conjunction with its annual conference.

RECREATIONAL THERAPISTS

I. OVERVIEW

Definition: Plan, organize and direct program of recreational activities as part of treatment to rehabilitate mentally and physically disabled persons. Assess patient's aptitudes, capabilities, interests and motivations to determine recreational program. Plan program with individuals or groups. Organize, conduct and promote social events. Direct and coordinate games, sports, arts and crafts, drama and sightseeing tours. Train and direct volunteers. Adapt games according to patient's mental and physical abilities. Discuss patient's progress and submit reports. Feed and dress patients and perform other personal care duties, if required.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since there is no professional association for recreational therapists, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 172 recreational therapists practicing in Alberta in 1984.[1] About 66 percent of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The number of recreational therapists increased by 14 percent during the 1982-1984 period. The provincial recreational therapist-to-population ratio was 1:13,735 in 1984.

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

None.

b) Licensing, Registration, or Certification Authority:

None.

c) Legislation:

There is no legislation regulating recreational therapists in Alberta at present.

III. PERSONNEL DATA

TABLE 1 NUMBER OF RECREATIONAL THERAPISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	4	58,100	1: 14,525
2 (Lethbridge)	10	117,900	1: 11,790
3 (Pincher Creek)	4	38,300	1: 9,575
4 (Hanna)	1	12,700	1: 12,700
5 (Drumheller)	7	40,900	1: 5,843
6 (Calgary)[3]	2	77,486	1: 38,743
7 (Stettler)	0	42,500	-
8 (Red Deer)	20	134,300	1: 6,715
9 (Banff)	0	23,600	-
10 (Camrose)	4	82,100	1: 20,525
11 (Edmonton)[4]	0	118,752	-
12 (Fort McMurray)	2	92,100	1: 46,050
13 (Whitecourt)	0	56,400	-
14 (Hinton)	1	27,000	1: 27,000
15 (Grande Prairie)	4	137,800	1: 34,450
Census Metropolitan Area of Calgary	57	619,814[5]	1: 10,874
Census Metropolitan Area of Edmonton	56	682,648[5]	1: 12,190
PROVINCIAL TOTAL	172	2,362,400	1: 13,735

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[1] Source: "March 31, 1984 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RECREATIONAL THERAPISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	151[1]	150[2]	172[3]
% Change in Number of Practicing Personnel	24.8%	-0.7%	14.7%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1:15,382	1:15,710	1:13,735

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Mount Royal College offers a two-year associate diploma program in therapeutic recreation. There were 19 graduates from the program in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAM FOR RECREATIONAL THERAPISTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	26	36	31
2nd Year	13	11	14
Graduates:	13	7	19[2]

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

[2] The number of graduates exceeds the number of second year enrolments because all part-time students are included in first year enrolments.

b) Continuing Education Programs:

There were no continuing education programs for recreational therapists in Alberta in 1984.

REGISTERED NURSES

I. OVERVIEW

Definition: Provides total nursing care for patients in hospitals, nursing homes, extended-care facilities and other establishments: Discusses and plans total nursing care of assigned patients with physician and other members of health team. Directs activities of nursing team or performs nursing activities to provide nursing care of patients. Administers prescribed medications and treatments. Observes, records and reports symptoms and changes in patients' condition. Makes nursing rounds and accompanies physician on medical rounds to evaluate needs of individual patients and to assess effectiveness of nursing care. Counsels patient and family in health care and treatment to be continued at home. Directs or carries out established procedures to prepare essential facilities and equipment, and assists physician in examiniations, treatments, surgery and deliveries. Performs nursing activities in obstetrics, paediatrics, orthopaedics and other clinical specializations.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

There were 20,124 nurses who were residing in Alberta and registered with the Alberta Association of Registered Nurses (A.A.R.N.) in 1984.[1] According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, 14,952 registered nurses were employed as of March 31, 1984.[2] About 62 percent of the registered nurses were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of nurses registered in Alberta increased by 13.3 percent between 1982 and 1984, while the provincial population grew by 1.7 percent during the same period. The registered nurse-to-population ratio was 1:117 in 1984.

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1984. Excludes inactive, honorary, associate, and retired members.

[2] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Registered Nurses
10256 - 112th Street
Edmonton, Alberta
T5K 1M6

Executive Director: Ms. Yvonne Chapman

b) Licensing, Registration, or Certification Authority:

Alberta Association of Registered Nurses
10256 - 112th Street
Edmonton, Alberta
T5K 1M6

c) Legislation:

Proclaimed on January 1, 1984, the Nursing Profession Act replaced the Registered Nurses Act. Subject to certain exemptions, the Nursing Profession Act requires all nurses practicing in Alberta to be registered under the Act. Individuals who wish to use the title of "Registered Nurse" must register with the Alberta Association of Registered Nurses.

The Act gives the A.A.R.N. the authority to enter registered nurses and certified graduate nurses into the appropriate registers, and to grant special permits and temporary permits to others who wish to practice under the Act.

The Act establishes a Practice Review Committee which has the authority to investigate the desirable standards of competence for nursing practice in general and the competence of particular registered nurses or permit holders. Complaints concerning unskilled practice and professional misconduct by registered nurses or permit holders may be investigated by the Professional Conduct Committee. Educational requirements for registration are established by the Universities Coordinating Council.

III. PERSONNEL DATA

TABLE 1A NUMBER OF REGISTERED NURSES AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	387	58,100	1: 150
2 (Lethbridge)	1,003	117,900	1: 118
3 (Pincher Creek)	247	38,300	1: 155
4 (Hanna)	82	12,700	1: 155
5 (Drumheller)	204	40,900	1: 200
6 (Calgary)[3]	470	77,486	1: 165
7 (Stettler)	252	42,500	1: 169
8 (Red Deer)	1,158	134,300	1: 116
9 (Banff)	162	23,600	1: 146
10 (Camrose)	539	82,100	1: 152
11 (Edmonton)[4]	759	118,752	1: 156
12 (Fort McMurray)	591	92,100	1: 156
13 (Whitecourt)	282	56,400	1: 200
14 (Hinton)	85	27,000	1: 318
15 (Grande Prairie)	710	137,800	1: 194
Census Metropolitan Area of Calgary	5,704	619,814[5]	1: 109
Census Metropolitan Area of Edmonton	6,798	682,648[5]	1: 100
Regional Location Unknown	691		
PROVINCIAL TOTAL	20,124	2,362,400	1: 117

---

[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1984. Excludes inactive, honorary, associate, and retired members.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 1B

NUMBER OF REGISTERED NURSES AND PERSONNEL-TO-POPULATION RATIO BY COMMUNITY, ALBERTA, 1984

Community by Size	Number Registered[1]	Population[2]	Registered Nurses to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	5,704	619,814	1: 109
Census Metropolitan Area of Edmonton	6,798	682,648	1: 100
Between 10,000 and 60,000			
Airdrie	76	10,431	1: 137
Camrose	120	12,751	1: 106
Fort McMurray	292	35,352	1: 121
Grande Prairie	229	24,411	1: 107
Leduc	125	12,471	1: 100
Lethbridge	654	58,586	1: 90
Medicine Hat	333	41,493	1: 125
Red Deer	643	51,070	1: 79
Spruce Grove	136	11,569	1: 85
Wetaskiwin	120	10,022	1: 84
Between 5,000 and 10,000			
Brooks	75	9,421	1: 126
Drumheller	57	6,671	1: 117
Edson	38	7,110	1: 187
High River	75	5,114	1: 68
Hinton	41	8,904	1: 217
Innisfail	62	5,435	1: 88
Lacombe	74	5,954	1: 80
Lloydminster	36	9,226	1: 256
Peace River	59	6,043	1: 102
Ponoka	137	5,221	1: 38
Rocky Mountain House	4	5,126	1: 1,282
Stettler	55	5,136	1: 93
Stony Plain	71	5,291	1: 75
Taber	63	6,384	1: 101
Vegreville	64	5,251	1: 82
Whitecourt	35	5,408	1: 155
Under 5,000	3,257	690,088	1: 212
Regional Location Unknown	691		
TOTAL	20,124	2,362,400	1: 117

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[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1984. Excludes inactive, honorary, associate, and retired members.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REGISTERED NURSES IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered Personnel[1]	17,767	17,770	20,124
% Change in Number of Registered Personnel	5.2%	0.0%	13.2%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 131	1: 133	1: 117
- Western Canada[4]	1: 119	1: 122	1: 117
- Canada[5]	1: 115	1: 115	-

[1] Source: Alberta Association of Registered Nurses. Number of nurses registered with the A.A.R.N. and residing in Alberta as of September 30, 1982, 1983, and 1984 Excludes inactive, honorary, associate, and retired members.

[2] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[3] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Source: The 1982 information is based on: (i) Rollcall Update 82. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1983. (ii) Health Manpower Provincial Report, Manitoba, 1982. Winnipeg, Manitoba: Manitoba Department of Health, 1982. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to nurses registered with their respective provincial professional associations.
The 1983 and 1984 information is based on: (i) Rollcall Update 84. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Surveys of professional associations conducted by the Alberta Health and Social Services Disciplines Committee. All figures refer to nurses registered with their respective provincial professional associations.

[5] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In 1983-84, there were 15 basic education programs (11 diploma nursing programs, two baccalaureate nursing programs for registered nurses in Alberta, and two supplementary programs in general nursing for registered psychiatric nurses leading to registered nurse status). These programs produced a total of 661 graduates (579 diploma nurses and 82 baccalaureate nurses) in 1983-84. Table 3A lists the basic education programs and the two supplementary programs.

Two baccalaureate nursing programs were offered at the University of Alberta and the University of Calgary. Seven of the 11 diploma programs were offered at community colleges. The others were hospital-based programs.

In addition, there were twelve post-basic education programs for registered nurses in Alberta. Seven of these programs lead to certificates and the other five programs lead to degrees (three post-basic baccalureate degree nursing for diploma nurses and two masters degree programs). These programs produced a total of 239 graduates in 1983-84. Table 3B lists the various post-basic education programs for registered nurses.

TABLE 3A BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

A. DIPLOMA NURSING PROGRAMS

	1981-82	1982-83	1983-84
Grant MacEwan Community College (Program Length: 88 weeks)			
Enrolments:			
1st Year	74	91	88
2nd Year	52	81	73
Graduates:	49	71	65
Keyano College[2] (Program Length: 88 weeks)			
Enrolements:			
1st Year	-	-	24
Medicine Hat College (Program Length: 88 weeks)			
Enrolments:			
1st Year	51	63	60
2nd Year	10	22	22
Graduates:	10	26	11
Mount Royal College (Program Length: 88 weeks)			
Enrolments:			
1st Year	95	131	148
2nd Year	67	58	75
Graduates:	60	54	65
Red Deer College (Program Length: 88 weeks)			
Enrolments:			
1st Year	64	74	81
2nd Year	60	54	77
Graduates:	44	51	67
Lethbridge Community College (Program Length: 88 weeks)			
Enrolments:			
1st Year	48	60	84
2nd Year	40	38	54
Graduates:	33	28	38

TABLE 3A (cont'd)

	1981-82	1982-83	1983-84
Grande Prairie Regional College[3] (Program Length: 88 weeks)			
Enrolments:			
1st Year	-	21	26
2nd Year	-	-	16
Graduates	-	-	13
Royal Alexandra Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	95	120	127
2nd Year	76	81	92
3rd Year	87	69	68
Graduates:	76	69	68
Misericordia Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	70	70	80
2nd Year	59	63	63
3rd Year	49	53	57
Graduates:	46	52	56
Foothills Hospital (Program Length: 3 years)			
Enrolments:			
1st Year	129	150	150
2nd Year	77	121	120
3rd Year	92	61	98
Graduates:	92	61	98
University of Alberta Hospitals (Program Length: 2 1/3 years)			
Enrolments:			
1st Year	128	180	180
2nd Year	109	99	155
3rd Year	94	104	92
Graduates:	94	104	89
PROVINCIAL TOTAL			
Number of Diploma Programs: 11			
Graduates:	504	516	570

TABLE 3A (cont'd)

	1981-82	1982-83	1983-84
B. SUPPLEMENTARY NURSING DIPLOMA PROGRAMS (FOR REGISTERED PSYCHIATRIC NURSES)			
Grant MacEwan Community College (Program Length: 13 months)			
Enrolments:			
1st Year	8	1	15
Graduates:	7	1	9
Red Deer College[4] (Program Length: 12 months)			
Enrolments:			
1st Year	5	-	-
Graduates:	3	-	-
PROVINCIAL TOTAL			
Number of Supplementary Diploma Programs: 2			
Graduates:	10	1	9
PROVINCIAL TOTAL			
Total number of Diploma Nursing Programs: 13			
Graduates:	514	517	579
C. BACCALAUREATE NURSING PROGRAMS			
University of Alberta (Program Length: 4 years)			
Enrolments:			
1st Year	60	79	104
2nd Year	50	48	72
3rd Year	48	47	47
4th Year	33	45	43
Graduates:	33	45	43

TABLE 3A (cont'd)

	1981-82	1982-83	1983-84
University of Calgary (Program Length: 4 years)			
Enrolments:			
1st Year	64	64	66
2nd Year	47	56	60
3rd Year	50	44	51
4th Year	52	47	40
Graduates:	51	47	39
PROVINCIAL TOTAL			
Number of Baccalaureate Programs: 2			
Graduates:	84	92	82
PROVINCIAL TOTAL			
Number of Basic Nursing Education Programs: 15			
Graduates:	598	609	661

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

[2] This program commenced in 1983-84.

[3] This program commenced in 1982-83.

[4] From 1982-83 to 1983-84, this program was under review and suspended in the interim. It has been reinstated for the 1984-85 academic year.

TABLE 3B POST-BASIC EDUCATION PROGRAMS FOR REGISTERED NURSES IN ALBERTA[1]

	1981-82	1982-83	1983-84
A. CERTIFICATE EDUCATION PROGRAMS			
Cardio-vascular Intensive Care Nursing[2] University of Alberta Hospitals (Program Length: variable)			
Enrolments: 1st year	7	8	-
Graduates:	6	7	-
Operating Room Nursing[2] University of Alberta Hospitals (Program Length: 24 weeks)			
Enrolments: 1st year	8	5	-
Graduates:	8	5	-
Occupational Health Nursing Grant MacEwan Community College (Program Length: 1 year)			
Enrolments: 1st year	51	49	33
Graduates:	20	46	11
Advanced Practical Obstetric Nursing University of Alberta (Program Length: 26 weeks)			
Enrolments: 1st year	10	12	10
Graduates:	6	12	9
Nurse Practitioner University of Alberta (Program Length: 5 months)			
Enrolments: 1st year	19	10	15
Graduates:	16	10	11

TABLE 3B (cont'd)

	1981-82	1982-83	1983-84
Extended Care Nursing			
Grant MacEwan Community College (Program Length: 1 year)			
Enrolments: 1st year	186	229	243
Graduates:	0	9	24
Mental Health Nursing			
Mount Royal College (Program Length: 1 year)			
Enrolments: 1st year	23	29	39
Graduates:	8	7	13
PROVINCIAL TOTAL			
Number of Post-Basic Certificate Programs: 7			
Graduates:	64	96	68
B. **DEGREE EDUCATION PROGRAMS**			
Baccalaureate Nursing Program for Diploma Nurses			
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	131	108	144
2nd Year	116	139	124
Graduates:	90	104	103
University of Calgary (Program Length: 2 years)			
Enrolments:			
1st Year	50	50	50
2nd Year	32	45	40
Graduates:	30	55	48

TABLE 3B (cont'd)

	1981-82	1982-83	1983-84
University of Lethbridge (Program Length: 2 years)			
Enrolments:			
1st Year	32	21	37
2nd Year	28	24	11
Graduates:	28	23	10
PROVINCIAL TOTAL			
Number of Baccalaureate Nursing Programs for Diploma Nurses: 3			
Graduates:	148	182	161
C. GRADUATE DEGREE EDUCATION PROGRAM			
Masters of Nursing			
University of Alberta (Program Length: 2 years)			
Enrolments:			
1st Year	12	12	15
2nd Year	4	11	13
Graduates:	2	3	4
University of Calgary (Program Length: 2 years)			
Enrolments:			
1st Year	8	8	8
2nd Year	0	7	7
Graduates	0	7	6
PROVINCIAL TOTAL			
Number of Masters of Nursing Programs: 2			
Graduates:	2	10	10

TABLE 3B (cont'd)

	1981-82	1982-83	1983-84
PROVINCIAL TOTAL			
Number of Post-Basic Education Programs: 12			
Graduates:	214	288	239

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

[2] There are no figures available for 1983-84, because these programs have been placed under review.

b) Continuing Education Programs:

Continuing education courses and programs for registered nurses were made available through a number of sources in Alberta. The Bylaws of the Alberta Association of Registered Nurses state that in order to be eligible for active registration, nurses must have been employed in the practice of nursing for 150 days in the past 5 membership years or provide evidence confirming their present competency to practice. In accordance with this regulation, the Association encourages the development of refresher programs for inactive nurses who intend to re-register. All refresher programs offered in Alberta must be approved by the A.A.R.N.

In 1983-84, fourteen institutions (Foothills Hospital, Medicine Hat College, Grant MacEwan Community College, Misericordia Hospital, Lethbridge Community College, Mount Royal College, Red Deer College, Alberta Vocational Centre-Grouard, Alberta Vocational Centre - Lac La Biche, Grande Prairie Regional College, Keyano College, Lakeland College, Olds College, and University of Alberta Hospitals) offered refresher courses in nursing. The length of these courses varied from eight to ten weeks. There were 476 students enrolled in refresher courses during the 1983-84 academic year, and there were 439 graduates.

The annual convention of the A.A.R.N. is usually held in May of each year. The Association often sponsors workshops, lectures, and seminars in conjunction with its annual convention.

The University of Alberta and the University of Calgary offered continuing education programs for nurses in various areas of the province. A number of colleges also provided continuing education programs of interest to nurses. Orientation programs, in-service programs, and other types of continuing education programs were offered by individual employing agencies. Programs varied in length and covered a wide range of topics.

APPENDIX

REGISTERED NURSES BY SPECIALTY AND REGISTERED NURSE-TO-POPULATION RATIOS BY SPECIALTY, ALBERTA, 1984[1]

Specialty	Number of Practicing Nurses	Practicing Registered Nurse-To-Population Ratio
Administrative	1,438	1: 1,643
Community/Public Health	776	1: 3,044
Emergency Room	481	1: 4,911
Home Care	309	1: 7,645
Intensive Care Units (C.C.U., I.C.U., Burn)	1,062	1: 2,224
Intravenous Therapy	38	1:62,168
Labor Delivery Recovery Suite	353	1: 6,692
Long Term Care/Rehabilitation	1,531	1: 1,543
Maternal/Child	654	1: 3,612
Medical, Surgical	3,559	1: 664
Nursing Education	440	1: 5,369
Occupational/Staff Health	482	1: 4,901
Operating Room	607	1: 3,892
Out Patient Services	159	1:14,858
Paediatrics	632	1: 3,738
Physicians' Offices, Medical or School Clinics	386	1: 6,120
Psychiatric[2]	609	1: 3,879
Recovery Room	134	1:17,630
Short Stay Unit Staff	137	1:17,244
Specialty Total	13,787	1: 171
Others	1,165	1: 2,028
GRAND TOTAL	14,952	1: 158

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

Note: The total number of personnel in this table is less than the total number of personnel in Table 1. This is because this table shows the number of practicing personnel as of March 31, 1984, whereas Table 1 shows the number of nurses who were registered with the Alberta Association of Registered Nurses as of September 30, 1984.

[2] This figure is inflated due to the fact that when completing the 1984 survey, one major employer reported all psychiatric nurses as registered nurses - psychiatric.

REGISTERED NURSING ASSISTANTS

I. OVERVIEW

Definition: Provide nursing care for patients in hospitals, nursing homes, clinics and similar establishments. Take and record blood pressure, temperature, pulse and respiration rates. Apply dressings and administer injections, medications and treatments under supervision. Report and record observations and symptoms indicative of change in condition of patients. Assist with admission and discharge of patients. Bathe patients, make beds and assist with rehabilitation procedures. Feed and assist patients in feeding themselves. Answer call-bells and patients' or visitors' inquiries and perform other bedside services. Perform duties in operating room, outpatients and other specialized areas, if required.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

In 1977 certified nursing aides and registered nursing orderlies were re-named registered nursing assistants in accordance with the Nursing Assistants Registration Act of 1976.

There were 7,497 nursing assistants who were residing in Alberta and registered with the Nursing Assistants Registration Board in 1984.[1] According to a manpower survey conducted by the Alberta Health and Social Services Disciplines Committee, there were 4,086 registered nursing assistants employed as of March 31, 1984.[2] About half of the registered nursing assistants were located in the Census Metropolitan Areas of Calgary and Edmonton. The number of registered nursing assistants in Alberta increased by 11.2 percent between 1982 and 1984, while the provincial population grew by 1.7 percent during the same period. The registered nursing assistant-to-population ratio was 1:315 in 1984.

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[1] Source: Nursing Assistants Registration Board. Number of nursing assistants registered with the Nursing Assistants Registration Board and residing in Alberta as of December 31, 1984.

[2] Source: "March 31, 1984 Survey of Employers of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Associations:

Alberta Association of Registered Nursing Assistants[1]
17410 - 107 Avenue
Edmonton, Alberta
T5S 1E9

President: Ms. Roberta Metheral

Alberta Association of Registered Nursing Orderlies
9606 - 71 Avenue
Edmonton, Alberta
T6E 0W3

Executive Secretary: Mr. Paul Wolff

b) Licensing, Registration, or Certification Authority:

Nursing Assistants Registration Board
c/o Professions and Occupations Bureau
9th Floor, John E. Brownlee Building
10365 - 97 Street
Edmonton, Alberta
T5J 3W7

Chairman: Mr. J. Briggs

c) Legislation:

Under the authority of the Nursing Assistants Registration Act, all individuals who wish to use the title of "Registered Nursing Assistant" must register with the Nursing Assistants Registration Board, a provincial government licensing body. Annual re-registration with the Board is required of all individuals in order to continue using the title of "Registered Nursing Assistant". Membership with the Alberta Association of Registered Nursing Assistants or the Alberta Association of Registered Nursing Orderlies is voluntary.

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[1] Formerly the Alberta Certified Nursing Aide Association.

The Nursing Assistants Registration Board sets the basic educational qualifications required for registration with the Board for nursing assistants trained outside of Alberta. The Minister of Advanced Education sets the basic educational qualifications required for registration with the Board for nursing assistants trained in Alberta.

On November 30, 1983 nursing assistants were designated under the Health Disciplines Act. The Minister Responsible for Professions and Occupations established a Health Disciplines Committee for Nursing Assistants on September 12, 1984. This Committee will be preparing draft regulations for presentation to the Health Disciplines Board.

III. PERSONNEL DATA

TABLE 1A NUMBER OF REGISTERED NURSING ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	190	58,100	1: 306
2 (Lethbridge)	365	117,900	1: 323
3 (Pincher Creek)	144	38,300	1: 266
4 (Hanna)	86	12,700	1: 148
5 (Drumheller)	130	40,900	1: 315
6 (Calgary)[3]	238	77,486	1: 326
7 (Stettler)	242	42,500	1: 176
8 (Red Deer)	438	134,300	1: 307
9 (Banff)	94	23,600	1: 251
10 (Camrose)	358	82,100	1: 229
11 (Edmonton)[4]	453	118,752	1: 262
12 (Fort McMurray)	215	92,100	1: 428
13 (Whitecourt)	206	56,400	1: 274
14 (Hinton)	56	27,000	1: 482
15 (Grande Prairie)	537	137,800	1: 257
Census Metropolitan Area of Calgary	1,416	619,814[5]	1: 438
Census Metropolitan Area of Edmonton	2,278	682,648[5]	1: 300
Regional Location Unknown	51		
PROVINCIAL TOTAL	7,497	2,362,400	1: 315

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[1] Source: Nursing Assistants Registration Board. Number of nursing assistants registered with the Nursing Assistants Registration Board and residing in Alberta as of December 31, 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 1B NUMBER OF REGISTERED NURSING ASSISTANTS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1984

Community by Size	Number Registered[1]	Population[2]	Personnel-to-Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	1,416	619,814	1: 438
Census Metropolitan Area Of Edmonton	2,278	682,648	1: 300
Between 10,000 and 60,000			
Airdrie	34	10,431	1: 307
Camrose	73	12,751	1: 175
Fort McMurray	39	35,352	1: 906
Grande Prairie	108	24,411	1: 226
Leduc	64	12,471	1: 195
Lethbridge	182	58,586	1: 322
Medicine Hat	154	41,493	1: 269
Red Deer	178	51,070	1: 287
Spruce Grove	57	11,569	1: 203
Wetaskiwin	78	10,022	1: 128
Between 5,000 and 10,000			
Brooks	48	9,421	1: 196
Drumheller	27	6,671	1: 247
Edson	26	7,110	1: 273
High River	33	5,114	1: 155
Hinton	16	8,904	1: 557
Innisfail	57	5,435	1: 95
Lacombe	20	5,954	1: 298
Lloydminster	17	9,226	1: 543
Peace River	43	6,043	1: 141
Ponoka	42	5,221	1: 124
Rocky Mountain House	37	5,126	1: 139
Stettler	47	5,136	1: 109
Stony Plain	43	5,291	1: 123
Taber	25	6,384	1: 255
Vegreville	32	5,251	1: 164
Whitecourt	16	5,408	1: 338
Under 5,000	2,256	690,088	1: 306
Regional Location Unknown	51		
TOTAL	7,497	2,362,400	1: 315

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[1] Source: Nursing Assistants Registration Board. Number of nursing assistants registered with the Nursing Assisants Registration Board and residing in Alberta as of December 31, 1984.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REGISTERED NURSING ASSISTANTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Registered Personnel[1]	6,741	7,355	7,497
% Change in Number of Registered Personnel	N/A	9.1%	1.9%
Population (Alberta)	2,322,690[2]	2,356,500[2]	2,362,400[3]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1:345	1:320	1:315
- Western Canada[4]	1:365	1:362	1:366
- Canada[5]	1:305	1:300	-

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[1] Source: Alberta Nursing Assistants Registration Board. Number of Personnel registered with the Board and residing in Alberta as of December 31, 1982, 1983, and 1984.

[2] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1984.

[3] Source: "1984 Population Projections for Census Divisions". Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[4] Source: The 1982 information is based on: (i) Rollcall Update 82. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1983. (ii) Health Manpower Provincial Report, Manitoba, 1982. Winnipeg, Manitoba: Manitoba Department of Health, 1982. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee.
The 1983 information is based on: (i) Rollcall Update 83. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, March 1984. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee.
The 1984 information is based on: (i) Rollcall Update 84. Vancouver, British Columbia: Division of Health Services Research and Development, University of British Columbia, April 1985. (ii) Health Services Commission, Research and Planning, Manitoba Health, Winnipeg, Manitoba. (iii) Saskatchewan Health Manpower Report, 1982-84. Regina, Saskatchewan: Saskatchewan Health, 1985. (iv) Survey of professional associations conducted by the Alberta Health and Social Services Disciplines Committee.

[5] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Prior to academic year 1978-79, the Alberta Vocational Centres in Edmonton and Calgary offered separate nursing aide and nursing orderly programs, which were 10 months in length. The curriculum content and administrative structure of the nursing aide and nursing orderly programs have been revised. Beginning in 1978-79, these programs were formally amalgamated under the new title of "Nursing Assistant Certificate Program."

There were 276 graduates from the two training programs at the Alberta Vocational Centre, Calgary and the Alberta Vocational Centre, Edmonton in 1983-84. The former has an outreach program at Crowsnest Pass, and the latter has an outreach program at Grouard.

TABLE 3 BASIC EDUCATION PROGRAMS FOR NURSING ASSISTANTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
Alberta Vocational Centre, Calgary (Program Length: 38 weeks)			
Enrolments[2]	167	185	187
Graduates[2]	106	152	97
Alberta Vocational Centre, Edmonton (Program Length: 1 year)			
Enrolments	168	212	182
Graduates	112	146	155
Alberta Vocational Centre, Grouard[3] (Program Length: 1 year)			
Enrolments	47	29	30
Graduates	26	18	24
PROVINCIAL TOTAL			
Graduates	244	316	276

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

[2] Enrolment and graduate data for 1982-83 include data for the outreach program at Crowsnest Pass.

[3] This program is brokered from the Alberta Vocational Centre, Edmonton.

b). Continuing Education Programs:

The Alberta Association of Registered Nursing Assistants sponsored some continuing education programs for its members in 1984.

REHABILITATION PRACTITIONERS

I. OVERVIEW

Definition: Rehabilitation practitioners work in the provision of rehabilitation programs to the developmentally handicapped in a community or institutional setting. These workers are normally responsible for the delivery of established care and developmental programs based on client's needs in the areas of residential, family support, vocational, social education, recreation/leisure or developmental day care.

(Source: Government of Alberta)

Since registration with the Alberta Association of Habilitative Practitioners is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 1,225 rehabilitation practitioners practicing in Alberta in 1984.[1] About 55 percent of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. Another 26 percent were found in Census Division 8 where Michener Center, the province's largest institution for the developmentally handicapped, is located. The provincial rehabilitation practitioner-to-population ratio was 1:1,928 in 1984.

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Habilitative Practitioners
P.O. Box 887
Red Deer, Alberta
T4N 1K3

President: Ms. Adriana La Grange

b) Licensing, Registration, or Certification Authority:

Alberta Health Disciplines Board.

c) Legislation:

In 1982 rehabilitation practitioners applied to the Health Occupations Board for designation under the Health Occupations Act. On November 30, 1983, rehabilitation practitioners were designated under the Health Disciplines Act (formerly the Health Occupations Act). The Minister Responsible for Professions and Occupations established a Rehabilitation Practitioners Committee on November 1, 1984. This committee will be preparing draft regulations for presentation to the Health Disciplines Board (formerly the Health Occupations Board).

III. PERSONNEL DATA

TABLE 1 NUMBER OF REHABILITATION PRACTITIONERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practising[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	53	58,100	1: 1,096
2 (Lethbridge)	43	117,900	1: 2,742
3 (Pincher Creek)	0	38,300	-
4 (Hanna)	0	12,700	-
5 (Drumheller)	8	40,900	1: 5,113
6 (Calgary)[3]	13	77,486	1: 5,960
7 (Stettler)	11	42,500	1: 3,864
8 (Red Deer)	313	134,300	1: 429
9 (Banff)	4	23,600	1: 5,900
10 (Camrose)	7	82,100	1:11,729
11 (Edmonton)[4]	21	118,752	1: 5,655
12 (Fort McMurray)	36	92,100	1: 2,558
13 (Whitecourt)	0	56,400	-
14 (Hinton)	0	27,000	-
15 (Grande Prairie)	47	137,800	1: 2,932
Census Metropolitan Area of Calgary	265	619,814[5]	1: 2,339
Census Metropolitan Area of Edmonton	404	682,648[5]	1: 1,690
PROVINCIAL TOTAL	1,225	2,362,400	1: 1,928

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR REHABILITATION PRACTITIONERS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	1,125[1]	1,331[2]	1,225[3]
% Change in Number of Practicing Personnel	48.6%	18.3%	-8.0%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios: - Alberta	1:2,065	1:1,770	1:1,928

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[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March, 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

In 1983-84 there were both one-year certificate and two-year diploma programs in rehabilitation services at Grant MacEwan Community College, Lethbridge Community College, Mount Royal College, and Red Deer College. As of 1983-84, only Mount Royal College will maintain its certificate program. The other institutions will only enrol students in the diploma program. There were 106 graduates from the diploma programs and 62 graduates from the certificate programs in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAMS FOR REHABILITATION PRACTITIONERS IN ALBERTA[1]

	1981-82	1982-83	1983-84
CERTIFICATE AND DIPLOMA PROGRAMS IN REHABILITATIVE SERVICES			
Grant MacEwan Community College (Program Length: certificate - 1 year; diploma - 2 years)			
Enrolments:			
1st Year	117	112	143
2nd Year	30	34	33
Graduates:			
Certificate[2]	30	36	-
Diploma	19	19	28
Lethbridge Community College (Program Length: certificate - 1year; diploma - 2 years)			
Enrolments:			
1st Year	24	27	32
2nd Year	11	16	18
Graduates:			
Certificate[3]	10	-	-
Diploma	12	13	14

TABLE 3 (cont'd)

	1981-82	1982-83	1983-84
Mount Royal Community College (Program Length: certificate - 1 year; diploma - 2 years)			
Enrolments:[2]			
1st Year	57	51	74
2nd Year	18	19	23
Graduates:			
Certificate	-	-	3
Diploma	20	18	23
Red Deer College (Program Length: certificate - 1 year; diploma - 2 years)			
Enrolments:[2]			
1st Year	45	46	67
2nd Year	27	24	49
Graduates:			
Certificate[4]	34	42	59
Diploma	25	24	41
PROVINCIAL TOTAL			
Number of Certificate Training Programs: 4			
Graduates:	74	78	62
Number of Diploma Training Programs: 4			
Graduates:	76	74	106

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[1] Source: Alberta Health and Social Services Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

[2] The certificate program was offered for the last time in 1982-83.

[3] The certificate program was discontinued in 1982-83.

[4] The certificate program was offered for the last time in 1983-84.

b) Continuing Education Programs:

No continuing education programs were offered for rehabilitation practitioners.

RESPIRATORY TECHNOLOGISTS

I. OVERVIEW

Definition: Administer respiratory therapy to patients in hospital or at home. Discuss patient's treatment with medical and nursing staff. Set up ventilators, incubators, manual resuscitators and other life support equipment. Attach life support equipment to patient. Operate controls of equipment to adjust airway pressure, humidity, blood gas levels, respiratory rate and other factors. Monitor patient's progress and equipment function. Perform basic pulmonary function tests to assist physician in diagnosis of respiratory illnesses. Take blood sample from patient and analyze for blood gas values, if required. Explain treatment procedures and demonstrate equipment operation to patients and hospitals personnel. Perform artificial respiration and external cardiac massage, if required. Service and repair equipment and inspect all medical piping, manifolds and patient alarm system.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Society of Respiratory Technologists is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 298 respiratory technologists practicing in Alberta in 1984.[1] About 85 percent of these personnel were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial respiratory technologists-to-population ratio was 1:7,928 in 1984.

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[1] Source: "March 31, 1984 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Society of Respiratory Therapy
c/o Cardiac Diagnostic Unit
Edmonton General Hospital
11111 Jasper Avenue
Edmonton, Alberta
T5K 0L4

President: Miss Marleen Irwin

b) Licensing, Registration, or Certification Authority:

Alberta Health Disciplines Board.

c) Legislation:

In 1982 respiratory technologists applied to the Health Occupations Board for designation under the Health Occupations Act. On June 6, 1983 respiratory technologists were designated under the Health Disciplines Act (formerly the Health Occupations Act). On December 4, 1983, the Minister Responsible for Professions and Occupations established the Respiratory Technologists Committee. During 1984 this committee prepared draft regulations for this discipline. These regulations will be presented to the Health Disciplines Board (formerly the Health Occupations Board) in 1985.

III. PERSONNEL DATA

TABLE 1 NUMBER OF RESPIRATORY TECHNOLOGISTS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	3	58,100	1: 19,367
2 (Lethbridge)	11	117,900	1: 10,718
3 (Pincher Creek)	2	38,300	1: 19,150
4 (Hanna)	0	12,700	-
5 (Drumheller)	0	40,900	-
6 (Calgary)[3]	0	77,486	-
7 (Stettler)	0	42,500	-
8 (Red Deer)	16	134,300	1: 8,394
9 (Banff)	1	23,600	1: 23,600
10 (Camrose)	3	82,100	1: 27,367
11 (Edmonton)[4]	1	118,752	1:118,752
12 (Fort McMurray)	2	92,100	1: 46,050
13 (Whitecourt)	0	56,400	-
14 (Hinton)	0	27,000	-
15 (Grande Prairie)	5	137,800	1: 27,560
Census Metropolitan Area of Calgary	107	619,814[5]	1: 5,793
Census Metropolitan Area of Edmonton	147	682,648[5]	1: 4,644
PROVINCIAL TOTAL	298	2,362,400	1: 7,928

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[1] Source: "March, 31 1984 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR RESPIRATORY TECHNOLOGISTS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	288[1]	289[2]	298[3]
% Change in Number of Practicing Personnel	10.8%	0.3%	3.0%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios			
- Alberta	1: 8,065	1: 8,154	1: 7,928
- Canada[6]	1:11,469	1:10,251	-

[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

Both the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology offer two-year training programs for respiratory technologists. There were 53 graduates from these two programs in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAMS FOR RESPIRATORY TECHNOLOGISTS IN ALBERTA[1]

	1981-82	1982-83	1983-84
Northern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	31	44	40
2nd Year	29	30	32
Graduates:	25	26	27
Southern Alberta Institute of Technology (Program Length: 2 years)			
Enrolments:			
1st Year	28	31	28
2nd Year	24	23	29
Graduates:	18	17	26
PROVINCIAL TOTAL			
Number of Training Programs: 2			
Graduates:	43	43	53

[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

b) Continuing Education Programs:

The Alberta Society of Respiratory Therapists sponsored two education symposiums for its members and it also hosted its annual symposium.

In addition, the Edmonton chapter of the society provided six symposiums.

SOCIAL WORKERS

I. OVERVIEW

Definition: Counsels and aids individuals and families to understand and resolve their personal and social problems:

Interviews clients with problems; such as, personal, social and family adjustments, finances, employment, and physical and mental impairments, to determine nature, extent and causes of problems. Secures information, such as social, economic, environmental, medical and psychological factors, contributing to client's situation. Evaluates information obtained and assesses client's capacities. Determines type of assistance required, counsels client regarding plans for meeting needs, and assists client to mobilize his inner capacities and environmental sources to improve social functioning. Aids client, through casework methods, to modify attitudes and patterns of behaviour by increasing understanding of himself, his problems and his part in creating them. Refers client to community agencies and other organizations and arranges for provision of appropriate assistance; such as, financial aid, employment, vocational training, medical treatment, recreational opportunities or housing. Follows progress of client after immediate problems have been overcome, and compiles case records and prepares reports. May secure supplementary information, such as employment, police or medical records, or school reports. May work in collaboration with professionals in other disciplines.

(Source: Canadian Classification and Dictionary of Occupations. Ottawa, Ontario: Employment and Immigration Canada, 1980)

Since registration with the Alberta Association of Social Workers (A.A.S.W.) is not mandatory, the survey of health and social service personnel working in Alberta, conducted on March 31, 1984 by the Alberta Health and Social Services Disciplines Committee, is used as an alternative source of manpower information.

There were 2,114 social workers practicing in Alberta in 1984.[1] About 64 percent of the practicing social workers were employed in the Census Metropolitan Areas of Calgary and Edmonton. The provincial social worker-to-population ratio was 1:1,118 in 1984.

II. PROFESSIONAL ASSOCIATION AND LEGISLATION INFORMATION

a) Professional Association:

Alberta Association of Social Workers
Room #178, Edmonton Inn
11830 Kingsway Avenue
Edmonton, Alberta
T5G 0X5

President: Ms. Margaret Duhurst

b) Licensing, Registration, or Certification Authority:

Alberta Association of Social Workers
Room #178, Edmonton Inn
11830 Kingsway Avenue
Edmonton, Alberta
T5J 0X5

c) Legislation:

No legislation exists in Alberta requiring mandatory registration of all social workers practicing in the province. However, under the authority of the Social Workers Act, all individuals who wish to use the title of "Registered Social Worker" must register with the Alberta Association of Social Workers. Annual payment of fees is required to maintain registration. Membership in the A.A.S.W. is voluntary.

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

Upon complaint (supported by statutory declaration) against a registered social worker, the Alberta Association of Social Workers is empowered by the Social Workers Act to investigate the complaint and, if warranted, to discipline the social worker.

The Universities Coordinating Council evaluates the academic qualifications required for registration with the A.A.S.W. as a registered social worker. The A.A.S.W. sets experiential requirements and determines whether the person is of good character and reputation. Individuals who have a masters degree in social work, or individuals who have sufficient practical experience in social work and who have satisfactorily completed any examination assigned by the Universities Coordinating Council are eligible for registration with the A.A.S.W.

III. PERSONNEL DATA

TABLE 1A NUMBER OF SOCIAL WORKERS AND PERSONNEL-TO-POPULATION RATIOS BY CENSUS DIVISION, ALBERTA, 1984

Census Division (Major Urban Center)	Number Practicing[1]	Population[2]	Personnel-to-Population Ratio
1 (Medicine Hat)	36	58,100	1: 1,614
2 (Lethbridge)	84	117,900	1: 1,404
3 (Pincher Creek)	10	38,300	1: 3,830
4 (Hanna)	3	12,700	1: 4,233
5 (Drumheller)	20	40,900	1: 2,045
6 (Calgary)[3]	82	77,486	1: 945
7 (Stettler)	13	42,500	1: 3,269
8 (Red Deer)	119	134,300	1: 1,129
9 (Banff)	58	23,600	1: 407
10 (Camrose)	33	82,100	1: 2,488
11 (Edmonton)[4]	43	118,752	1: 2,762
12 (Fort McMurray)	90	92,100	1: 1,023
13 (Whitecourt)	27	56,400	1: 2,089
14 (Hinton)	14	27,000	1: 1,929
15 (Grande Prairie)	125	137,800	1: 1,102
Census Metropolitan Area of Calgary	622	619,814[5]	1: 996
Census Metropolitan Area of Edmonton	735	682,648[5]	1: 929
PROVINCIAL TOTAL	2,114	2,362,400	1: 1,118

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[1] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[3] Excludes the Census Metropolitan Area of Calgary.

[4] Excludes the Census Metropolitan Area of Edmonton.

[5] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 1B NUMBER OF SOCIAL WORKERS AND PERSONNEL-TO-POPULATION RATIOS BY COMMUNITY, ALBERTA, 1984

Community by Size	Number Practicing[1]	Population[2]	Social Worker-to Population Ratio
Over 60,000			
Census Metropolitan Area of Calgary	622	619,814	1: 996
Census Metropolitan Area of Edmonton	735	682,648	1: 929
Between 10,000 and 60,000			
Airdrie	5	10,431	1: 2,086
Camrose	13	12,571	1: 967
Fort McMurray	17	35,352	1: 2,080
Grande Prairie	55	24,411	1: 444
Leduc	7	12,471	1: 1,782
Lethbridge	67	58,586	1: 874
Medicine Hat	36	41,493	1: 1,153
Red Deer	83	51,070	1: 615
Spruce Grove	19	11,569	1: 609
Wetaskiwin	16	10,022	1: 626
Between 5,000 and 10,000			
Brooks	7	9,421	1: 1,346
Drumheller	19	6,671	1: 351
Edson	7	7,110	1: 1,016
High River	1	5,114	1: 5,114
Hinton	7	8,904	1: 1,272
Innisfail	7	5,435	1: 776
Lacombe	3	5,954	1: 1,985
Lloydminster	6	9,226	1: 1,538
Peace River	25	6,043	1: 242
Ponoka	13	5,221	1: 402
Rocky Mountain House	11	5,126	1: 466
Stettler	4	5,136	1: 1,284
Stony Plain	1	5,291	1: 5,291
Taber	9	6,384	1: 709
Vegreville	9	5,251	1: 583
Whitecourt	7	5,408	1: 773
Under 5,000	303	690,088	1: 2,278
TOTAL	2,114	2,362,400	1: 1,118

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[1] Source: "March 31, 1984 Survey of Health and Social Services Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[2] Source: "Population Statistics." Edmonton, Alberta: Department of Municipal Affairs, 1984.

TABLE 2 SELECTED MANPOWER STATISTICS FOR SOCIAL WORKERS IN ALBERTA, 1982, 1983, AND 1984

	1982	1983	1984
Number of Practicing Personnel	2,062[1]	2,202[2]	2,114[3]
% Change in Number of Practicing Personnel	17.4%	6.8%	-4.0%
Population (Alberta)	2,322,690[4]	2,356,500[4]	2,362,400[5]
% Change in Population	3.8%	1.5%	0.3%
Personnel-to-Population Ratios:			
- Alberta	1: 1,126	1: 1,070	1: 1,118
- Canada[6]	1: 3,004	1: 2,950	-

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[1] Source: "September 30, 1982 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1983.

[2] Source: "September 30, 1983 Survey of Employers of Health and Social Service Personnel." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, March 1984.

[3] Source: "March 31, 1984 Survey of Health and Social Service Personnel Working in Alberta." Edmonton, Alberta: Alberta Health and Social Services Disciplines Committee, December 1984.

[4] Source: Alberta Statistical Review (Fourth Quarter, 1983). Edmonton, Alberta: Alberta Bureau of Statistics, 1983.

[5] Source: "1984 Population Projections for Census Divisions." Edmonton, Alberta: Alberta Bureau of Statistics, October 1984.

[6] Source: Canada Health Manpower Inventory, 1984. Ottawa, Ontario: Health and Welfare Canada, 1985.

IV. EDUCATIONAL PROGRAMS

a) Basic Education Programs:

The University of Calgary offers both a four-year Bachelor of Social Work (B.S.W.) program and a one- or two-year Masters of Social Work (M.S.W.) program. There were 139 graduates from the B.S.W. program and 32 graduates from the M.S.W. program in 1983-84.

Satellite programs of the Faculty of Social Welfare, University of Calgary are located in Edmonton on the University of Alberta campus and in Lethbridge on the University of Lethbridge campus. The Edmonton Division offers a full range of courses at the first professional degree (B.S.W.) level whereas a partial range of B.S.W. courses are available in Lethbridge. Social work courses are also provided in Drumheller, Grande Prairie, Medicine Hat, Peace River, Red Deer, and St. Paul through tele-conferencing.

In addition to university level training, two-year programs leading to a diploma in social services are available at Grant MacEwan Community College, Mount Royal College, and Red Deer College. There were 120 graduates from these programs in 1983-84.

TABLE 3 BASIC EDUCATION PROGRAMS FOR SOCIAL WORKERS IN ALBERTA[1]

	1981-82	1982-83	1983-84
A. SOCIAL SERVICE DIPLOMA PROGRAMS			
Red Deer College (Program Length: 2 years)			
Enrolments:			
1st Year	25	25	25
2nd Year	23	23	22
Graduates:	23	20	20
Grant MacEwan Community College[2] (Program Length: 2 years)			
Enrolments:			
1st Year	82	106	98
2nd Year	60	58	73
Graduates:	57	37	47
Mount Royal College (Program Length: 2 years)			
Enrolments:			
1st Year	120	157	198
2nd Year[3]	17	53	8
Graduates:	34	36	53
PROVINCIAL TOTAL			
Number of Diploma Training Programs: 3			
Graduates:	114	93	120
B. BACCALAUREATE PROGRAM			
University of Calgary Bachelor of Social Work (Program Length: 4 years)			
Enrolments:[4]			
1st Year	41	23	21
2nd Year	81	81	59
3rd Year	195	185	235
4th Year	152	142	121
Graduates:	127	137	139

TABLE 3 (cont'd)

	1981-82	1982-83	1983-84
C. MASTERS PROGRAM			
University of Calgary Masters of Social Work (Program Length: 18 months)[5]			
Enrolments:			
1st Year	52	34	54
Graduates:	16	21	32

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[1] Source: Alberta Health and Social Service Training Program Inventory, 1983-84. Edmonton, Alberta: Department of Advanced Education, December 1984.

[2] As of 1982-83, outreach students have been included in the first year data.

[3] The number of graduates may exceed second year enrolments due to the manner in which second year status was calculated and yearly graduate statistics were compiled.

[4] The Faculty of Social Welfare admits students from other faculties into the third year of the B.S.W. program. This accounts for the discrepancy between the enrollment figures for the second year and the third year of the program.

[5] The M.S.W. program is one year in length following a B.S.W. degree. Students with an undergraduate degree other than a B.S.W. degree may be admitted to a two-year program.

b) Continuing Education Programs:

The Faculty of Social Welfare and the Faculty of Continuing Education of the University of Calgary provided continuing professional education in social work in various parts of the province to ensure that new approaches, research, and knowledge were made available to practicing social workers.

Continuing professional education programs were also offered by the Alberta Association of Social Workers. The Association also held its annual two-day conference.